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DECISION DOCUMENT
DOCK 5 LANDFILL, SWMU J-09
Hawthorne Army Depot
Hawthorne, Nevada
October 1999

OCT 01 1999

ENVIRONMENTAL PROTECTION

1. PURPOSE OF DECISION DOCUMENT

1.1 Introduction

This decision document describes the rationale for the remedial action at, and closure of, Solid Waste Management Unit (SWMU) J-09, Dock 5 Landfill, at the Hawthorne Army Depot (HWAD), Hawthorne, Nevada. This decision document was developed by the U.S. Army Corps of Engineers, Sacramento District (USACE), HWAD, and Day & Zimmermann Hawthorne Corporation, with support from the Nevada Department of Conservation and Natural Resources, Division of Environmental Protection (NDEP).

1.2 Site Description and Background

SWMU J-09 is located north of SWMU A-5 and about 3000 feet south of the intersection of 1st Avenue South and Highway 95, east of Group 4.

SWMU J-09 is a possible landfill adjacent to Dock 5. The site was identified by NDEP based on the assumption that it had been standard practice to dispose of waste materials at all of the docks on the base. No documentation was available of the area's use as a landfill.

Tetra Tech reviewed all previous work done for the Group B SWMUS and compiled an annotated bibliography for past work (Tetra Tech, 1993).

Tetra Tech inspected the site in November 1993. As with all of the docks, there was an adjacent depression as evidence that the ground surface had been disturbed. It was probable that this disturbed land was used to construct the explosion containment berms around the perimeter of the docks. Subsequently, construction materials and dunnage were probably burned adjacent to the docks. At Dock 5, no evidence of open burning or waste disposal was observed. However, the area west of the dock showed evidence of scarring by earth moving equipment, and a small pile of soil was observed about 500 feet southwest of the dock.

Dock 5 is located at the foot of a small alluvial fan at the northwest extremity of the Garfield Hills, approximately parallel with the 4,370 feet elevation contour. The ground surface near the dock was relatively smooth, becoming more rocky toward the base of the adjacent hills. This area may be subject to erosion during flash floods.

In 1974, a USGS observation well about 3,000 feet north of the site had a water level elevation of 4,144 feet msl. Tetra Tech conducted a base-wide ground water level survey in March, 1994. Based on this survey, ground water at SWMU J-09 was estimated at an elevation of 4,140 feet msl (230 feet bgs).

1.3 Chemicals of Concern

The potential chemicals of concern are listed in Table 1.

Table 1 - Summary of Chemicals of Concern

Chemical of Concern	Rationale Behind Designation	Reference
Metals	Possible metals disposal.	USACE 1993
Volatile Organic Compounds	Possible solvent disposal.	USACE 1993
Petroleum Hydrocarbons (added)	May have been used as a fuel for burning trash at loading dock.	Tetra Tech 1993

2. SUMMARY OF SITE RISK

Soil gas sample results were all non-detect. No VOCs (volatile organic compounds) or BTEX (benzene, toluene, ethylbenzene, and xylene) compounds were detected in the near surface and subsurface soils.

Total petroleum hydrocarbons as diesel (TPH-d) were detected in three surface samples with the greatest concentration being 1.6 mg/kg. These concentrations do not exceed the proposed closure goal for TPH-d of 100 mg/kg and therefore do not warrant further investigation. Metals were detected in all samples at concentrations below their respective closure goals.

3. SUMMARY OF REMEDIAL INVESTIGATIONS and REMEDIAL ACTIONS

3.1 Remedial Investigations

3.1.1 Objectives

The objective of the investigation at SWMU J-09 was:

- To determine the presence of metals, volatiles and petroleum hydrocarbons in the near surface and subsurface soils at the site.

This objective was met.

3.1.2 Planned and Actual Investigation

Planned and actual field activities are described in Table 2. Figure J-09-2 shows the locations of the actual field investigation activities

at SWMU J-09. A permanent monument was installed and surveyed, and SWMU boundaries delineated, at the locations shown on these figures. The appendices of this report include HWAD proposed closure goals for soils, laboratory detection limits for the analyses, survey results, and photographs. All activities were conducted based on the Work Plan (Tetra Tech, 1994a), Site Safety and Health Plan (Tetra Tech, 1994b) and the Chemical Data Acquisition Plan (Tetra Tech, 1994c).

Table 2 - Summary of Planned and Actual Field Investigation

Planned Investigation	Actual Investigation	Comments
Soil Gas Survey - 20 samples at 20 locations on west side, to 5 ft depths	Soil Gas Survey - 10 samples at 10 locations to 5 ft depths	Based upon ND results of first 10 samples, remaining 10 samples were not taken.
Surface Sampling - 10 samples at 10 locations plus 1 sample from soil pile	Surface Sampling - 10 samples at 10 locations plus 1 sample from soil pile	
Subsurface Sampling - CPT ^a sounding at 2 locations to 30 ft. CPT sampling at 3 locations to 30 ft depths, 4 samples per location	Subsurface Sampling - CPT sounding at 2 locations to 30 ft. CPT sampling at 2 locations to depths ranging from 13 to 15 ft, 1 to 2 samples per location	Refusal at lower depths. Could not collect samples at third location.
Surveying - GPS ^b at soil gas, near surface and CPT locations	Surveying - GPS at soil gas, surface soil and CPT locations	

^aCPT = Cone penetrometer testing

^bGPS = Global positioning system

Soil samples collected and analyses performed include the following:

<u>Sample Locations</u>	<u>Depth (ft)</u>	<u>Metals Analyses</u>	<u>BTEX Analyses</u>	<u>TPH-D Analyses</u>	<u>VOCs Analyses</u>
Near Surface					
SS01 - SS11 (11 locations)	0.5	Y	Y	Y	N
Subsurface					
SB01	10	Y	--	Y	Y
SB02	10, 14	Y	--	Y	Y

3.1.3 Results

Two CPT soundings to 30 feet were performed at the site and the stratigraphic interpretation of the logs indicated interlayered silty sand to gravelly sand.

Table 3 lists the soil gas analytical results for VOCs and BTEX compounds. All samples were non-detect.

Table 3 - Summary of Soil Gas Analytical Results

Sample No.	Sampled Date	Sample Depth (ft)	VOCs (ug/L) EPA Method 8010-M	BTEX (ug/L) EPA Method 8020-M
J09-SG-01	25-Jun-94	5.0	ND*	ND
J09-SG-02	25-Jun-94	5.0	ND	ND
J09-SG-03	25-Jun-94	5.0	ND	ND
J09-SG-04	25-Jun-94	5.0	ND	ND
J09-SG-05	25-Jun-94	5.0	ND	ND
J09-SG-06	25-Jun-94	5.0	ND	ND
J09-SG-07	25-Jun-94	5.0	ND	ND
J09-SG-08	25-Jun-94	5.0	ND	ND
J09-SG-09	25-Jun-94	5.0	ND	ND
J09-SG-10	25-Jun-94	5.0	ND	ND

*ND = Below laboratory method detection limits

Table 4 lists analytical results for metals in the surface and subsurface soil samples. The associated background levels and the proposed closure goals of metals are also shown in Table 4.

Table 4 - Summary of Metals Analytical Results

Sample Number	Sampled Date	Sample Depth (ft)	Metals (mg/kg)							
			EPA Method 6010 (Method 7471 for Hg)							
As	Ba	Cd	Cr	Pb	Hg	Se	Ag			
Near Surface Sampling										
J09-SS01-1-S	12-Jul-94	0.25 - 0.50	10	100	1.3	6.9	12	ND*	ND	ND
J09-SS02-1-S	12-Jul-94	0.25 - 0.50	18	170	2.2	13	21	0.04	6.7	ND
J09-SS03-1-S	12-Jul-94	0.25 - 0.50	8.3	100	2.1	7.3	11	ND	ND	ND
J09-SS04-1-S	12-Jul-94	0.25 - 0.50	9.5	120	1.7	8.6	13	ND	6.4	ND
J09-SS05-1-S	12-Jul-94	0.25 - 0.50	7.0	83	0.65	4.2	6.5	ND	ND	ND
J09-SS06-1-S	12-Jul-94	0.25 - 0.50	8.5	120	1.7	8.6	9.4	ND	6.3	ND
J09-SS07-1-S	12-Jul-94	0.25 - 0.50	16	160	2.1	12	13	ND	ND	ND
J09-SS08-1-S	12-Jul-94	0.25 - 0.50	7.8	110	1.2	6.9	9.9	ND	ND	ND
J09-SS09-1-S	12-Jul-94	0.25 - 0.50	5.0	85	1.5	6.0	8.7	ND	ND	ND
J09-SS10-1-S	12-Jul-94	0.25 - 0.50	ND	130	0.51	11	11	ND	ND	ND
J09-SS11-1-S	12-Jul-94	0.25 - 0.50	ND	160	0.64	6.4	7.0	ND	ND	ND
Subsurface Sampling										
J09-SB01-1-S	18-Aug-94	10.25 - 10.50	9.1	52	0.99	5.3	8.0	ND	ND	ND
J09-SB02-1-S	18-Aug-94	9.75 - 10.00	6.4	470	1.8	12	9.4	ND	ND	ND
J09-SB02-2-S	18-Aug-94	14.25 - 14.50	7.9	130	1.9	9.8	12	ND	ND	ND

Associated Background Samples	Soil series	Mappable Unit	Metals (mg/kg)								
B41	Gynelle	170	ND	71	1.2	7.9	6.9	ND	ND	ND	ND
Proposed Closure Goals			30	5600	40	80000	1000	24	400	40	

*ND = Below laboratory method detection limit

Table 5 lists the VOC, BTEX, and total petroleum hydrocarbons-diesel (TPH-d) analytical results for the surface and subsurface soil samples.

Table 5 - Summary of BTEX, TPH-Diesel and VOCs Analytical Results

Sample Number	Sampled Date	Sample Depth (ft)	BTEX (mg/kg)	VOCs (ug/kg)	TPH-Diesel (mg/kg)
			Immunoassay Test	EPA Method 8260	EPA Method 8015-M
Near Surface Sampling					
J09-SS01-1-S	12-Jul-94	0.25 - 0.50	< 2	--	ND*
J09-SS02-1-S	12-Jul-94	0.25 - 0.50	< 2	--	ND
J09-SS03-1-S	12-Jul-94	0.25 - 0.50	< 2	--	ND
J09-SS04-1-S	12-Jul-94	0.25 - 0.50	< 2	--	ND
J09-SS05-1-S	12-Jul-94	0.25 - 0.50	< 2	--	ND
J09-SS06-1-S	12-Jul-94	0.25 - 0.50	< 2	--	ND
J09-SS07-1-S	12-Jul-94	0.25 - 0.50	< 2	--	ND
J09-SS08-1-S	12-Jul-94	0.25 - 0.50	< 2	--	ND
J09-SS09-1-S	12-Jul-94	0.25 - 0.50	< 2	--	1.6
J09-SS10-1-S	12-Jul-94	0.25 - 0.50	< 2	--	1.0
J09-SS11-1-S	12-Jul-94	0.25 - 0.50	< 2	--	1.1
Subsurface Sampling					
J09-SB01-1-S	18-Aug-94	10.50 - 11.00	--	ND	ND
J09-SB02-1-S	18-Aug-94	10.00 - 10.50	--	ND	ND
J09-SB02-2-S	18-Aug-94	14.50 - 15.00	--	ND	ND

*ND = Below laboratory method detection limit

3.2 Remedial Actions

3.2.1 Summary of Remedial Alternatives

The remedial alternative for this site is the removal of all surface debris from the site.

3.2.2 Summary of Remedial Actions

All surface debris was removed from the site. Photographs of this site before and after implementation of this alternative are included at Appendix D.

4. PUBLIC/COMMUNITY INVOLVEMENT

It is U.S. Department of Defense (DOD) and Army policy to involve the local community throughout the investigation process at an installation. To initiate this involvement, HWAD has established a repository in the local public library, which includes final copies of all past studies and documents regarding environmental issues at the facility. This repository will be maintained and updated with all future final documents as they are issued to HWAD.

HWAD has solicited community participation in establishment of the restoration advisory board (RAB). However, because of insufficient public response, HWAD has not formed a RAB. HWAD will continue to solicit community involvement.

5. CONCLUSIONS and RECOMMENDATIONS

For comparison, the HWAD proposed closure goals are listed in Appendix A. These closure goals were used in evaluating the detected chemicals. Table 6 summarizes the samples with detected chemicals of concern.

Table 6 - Summary of Detected Chemicals of Concern

Sample Number	Sampled Date	Sample Depth (ft)	TPH-Diesel (mg/kg) EPA Method 8015-M
J09-SS09-1-S	12-Jul-94	0.25 - 0.50	1.6
J09-SS10-1-S	12-Jul-94	0.25 - 0.50	1.0
J09-SS11-1-S	12-Jul-94	0.25 - 0.50	1.1

Soil gas sample results were all non-detect. Near surface and subsurface soils sampled were non-detect for VOCs and BTEX.

TPH-d was detected in three surface samples up to 1.6 mg/kg. These concentrations do not exceed the proposed closure goal for TPH-d of 100 mg/kg and therefore do not warrant further investigation. Metals were detected in all samples at concentrations below their respective closure goals.

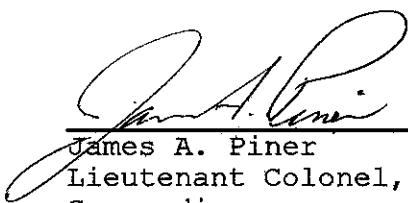
It is recommended that no further investigation be performed at this SWMU and that the site be recommended for closure with regard to these chemicals of concern and without land use restrictions.

6. DECLARATION

The selected remedy is protective of human health and the environment. It has been shown that a complete exposure pathway to human health and the environment does not exist, and there is no potential for such an exposure pathway to be completed in the future.

U.S. ARMY

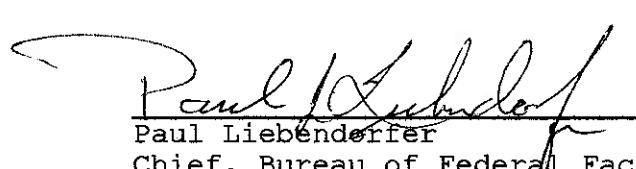
30 SEP 1999
Date



James A. Piner
Lieutenant Colonel, U.S. Army
Commanding

STATE OF NEVADA

13 OCT 1999
Date

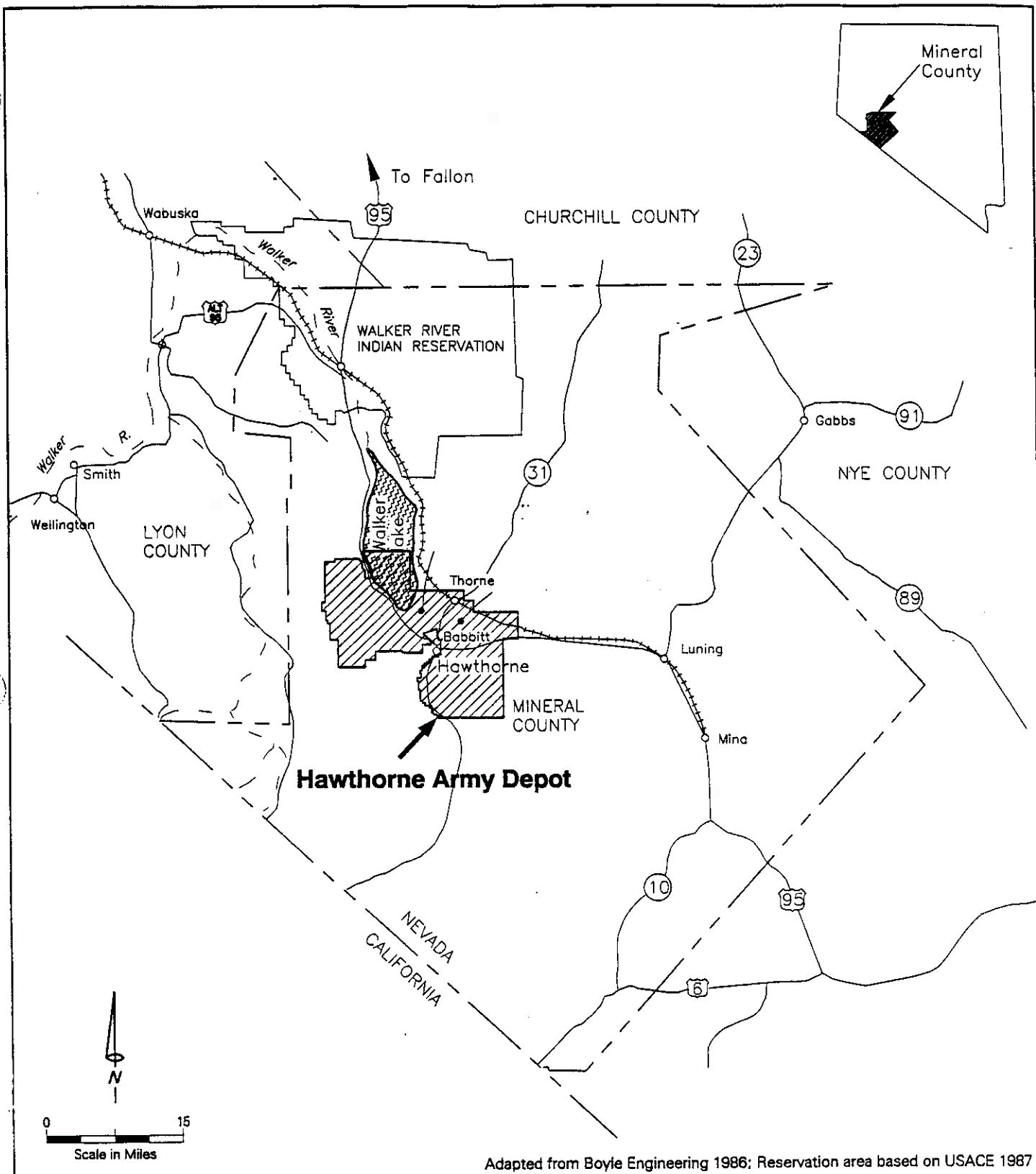


Paul Liebendorfer
Chief, Bureau of Federal Facilities

REFERENCES

- Tetra Tech. 1993. Draft Technical Memorandum for Group B SWMUs, Hawthorne Army Ammunition Plant. November 22, 1993.
- Tetra Tech. 1994a. Remedial Investigation, Group B SWMUs, Final Work Plan, Volume 1, Investigation Description, and Volume 2, Sampling and Analysis Plans, Hawthorne Army Ammunition Plant. May, 1994.
- Tetra Tech. 1994b. Site Safety and Health Plan, Hawthorne Army Ammunition Plant. June, 1994.
- Tetra Tech. 1994c. Final Chemical Data Acquisition Plan, Hawthorne Army Ammunition Plant. June 28, 1994.
- Tetra Tech. 1995. Group B Chemical Data Submittal, Hawthorne Army Ammunition Plant. March, 1995.
- USACE. 1993. Installation Action Plan for Hawthorne Army Ammunition Plant (HWAAP), prepared by S. Hong.
- Van Denburgh, A.S. and F.E. Rush. 1975. Source of Nitrate in Water from Supply Well 8, Hawthorne Naval Ammunition Depot, Nevada. U.S. Geological Survey administrative report, prepared in cooperation with the U.S. Navy. March, 1975. 23 pp.
- Tetra Tech. 1996. Hawthorne Army Depot Remedial Investigation Group B solid Waste Management Units, Final Closure Report, SWMU A-03 Coal Ash Landfill, SWMU B-28a 108-20a EO Spill Impoundment, SWMU B-28b 108-20b EO spill Impoundment, SWMU B-28c 104-8 EO Spill Impoundment, SWMU B-28d 104-10 EO Spill Impoundment, SWMU I-14 Bldg 46 Spill Site, SWMU J-04 107 Drum Storage, SWMU J-05 Dock 1 Landfill, SWMU J-06 Dock 2 Landfill, SWMU J-07 Dock 3 Landfill, SWMU J-08 Dock 4 Landfill, SWMU J-09 Dock 5 Landfill, SWMU J-10 Dock 6 Landfill, SWMU J-13 WADF South Dump, SWMU J-17 Thorne Drum Area, SWMU J-21 Bldg 97 Old Dock Area, SWMU J-22 50 Group Pits, SWMU J-24 Trench near 50-60.

Figures



Location Map

Legend

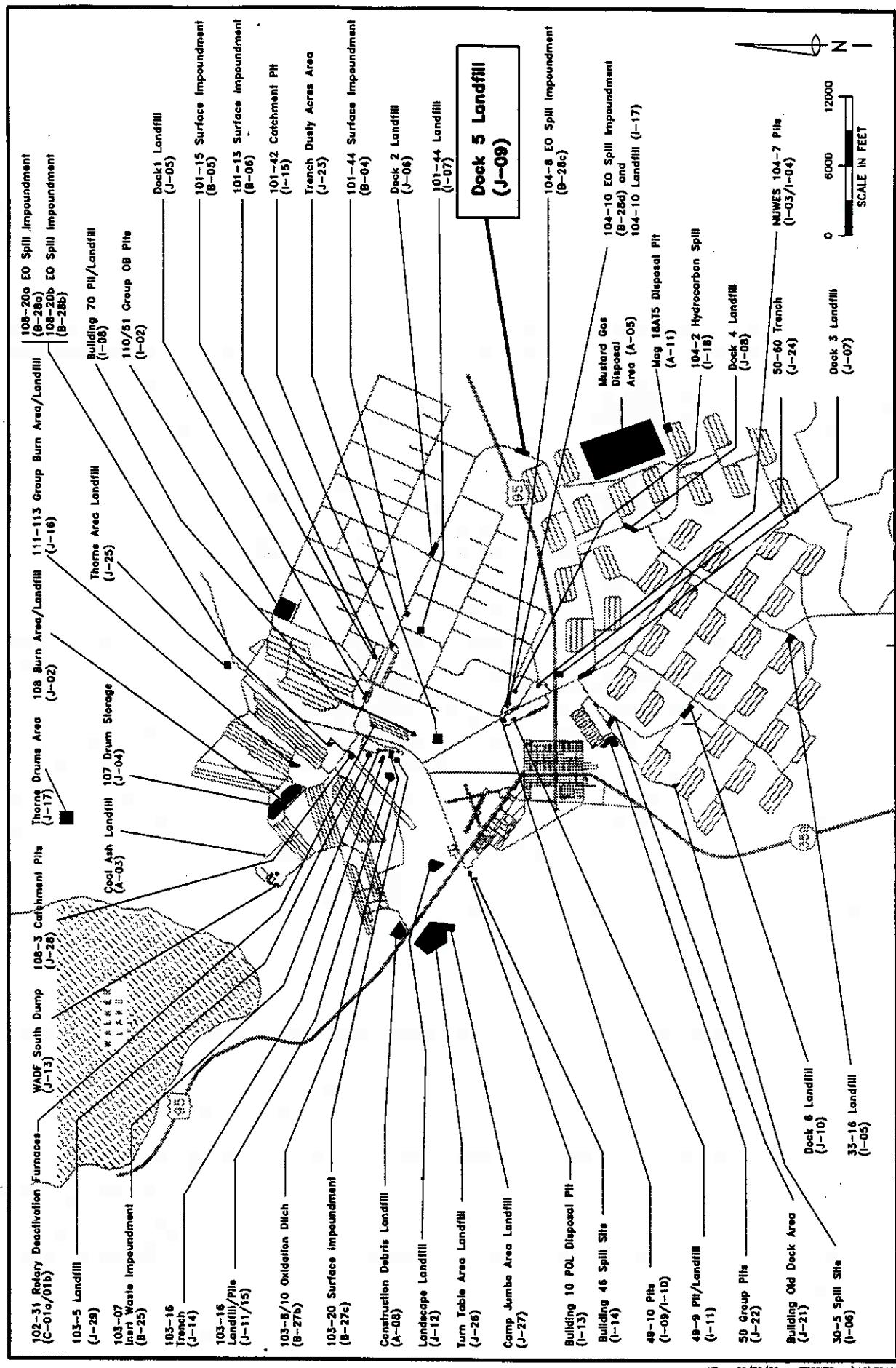


Hawthorne Army Depot

Hawthorne Army Depot
Hawthorne, Nevada



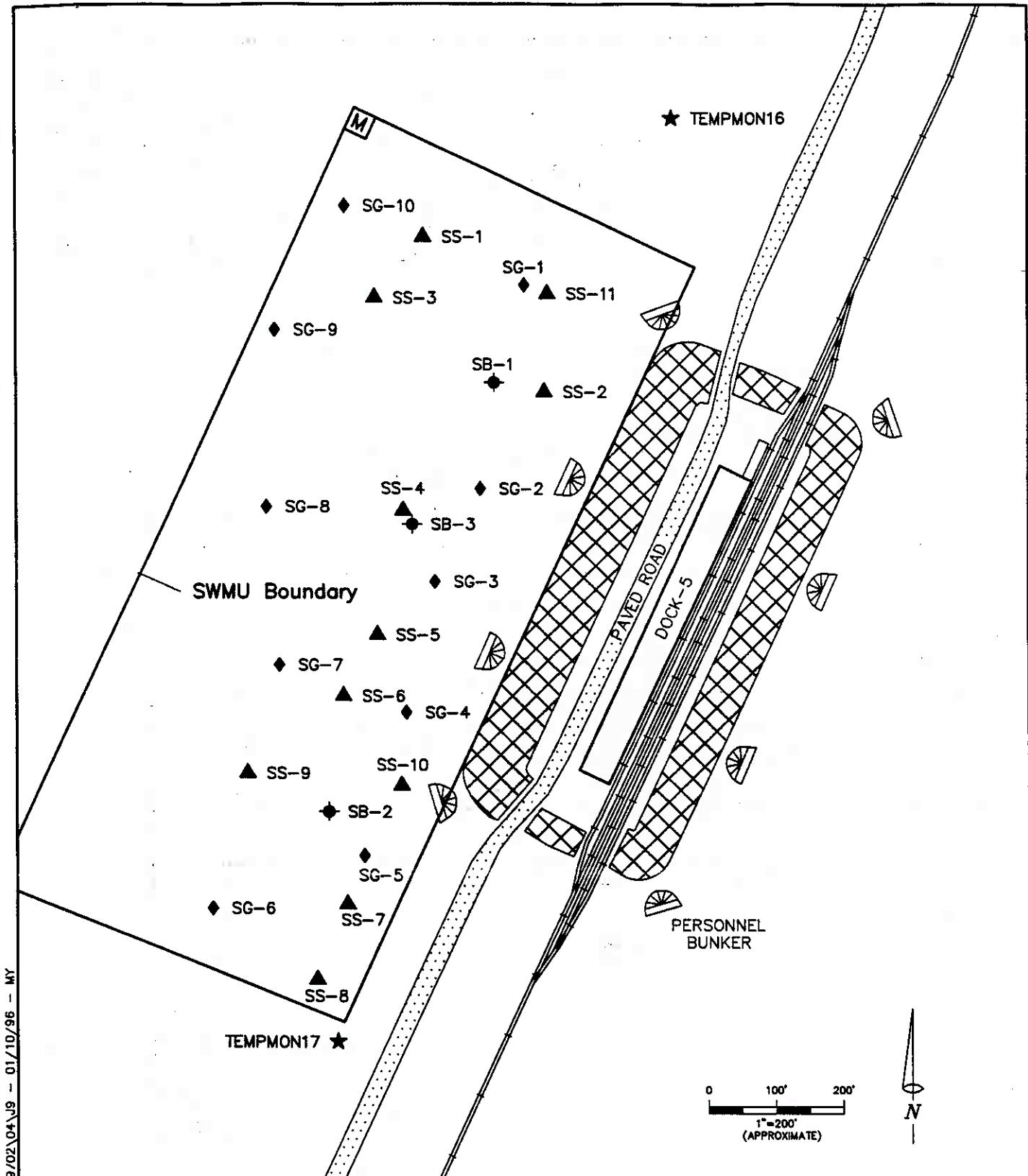
Tetra Tech, Inc.



Hawthorne Army Depot
Location Map

Hawthorne, Nevada

Figure SWMU-J-09-1



LEGEND:

- ★ SWMU Reference point
- ◆ SG-X Soil gas sample location and number
- ▲ SS-X Surface sample location and number
- ◆ SB-X Soil boring location and number
- Monument location
- Explosion barrier

■ Monument location

TETRA TECH

**Activity Map
SWMU J-09
Dock 5 Landfill**

Hawthorne Army Depot
Hawthorne, Nevada

Appendix A

Proposed Closure Goals
Hawthorne Army Depot
Hawthorne, Nevada

Constituent of Concern	Chemical Classification	Giocarcinogenic (C) or Non-carcinogenic (NC)	HWAD Proposed Closure Goals for Soil (mg/kg)	HWAD Proposed Closure Goal Source
Nitrate	Anion	NC	128,000	Calculated Subpart S ^a
2-Amino-dinitrotoluene	Explosive	NC	-	NA ^b
4-Amino-dinitrotoluene	Explosive	NC	-	NA
1,3-Dinitrobenzene	Explosive	NC	8	Calculated Subpart S
2,4-Dinitrotoluene	Explosive	NC	160	Calculated Subpart S
2,6-Dinitrotoluene	Explosive	NC	80	Calculated Subpart S
HMX	Explosive	NC	4,000	Calculated Subpart S
Nitrobenzene	Explosive	NC	40	Calculated Subpart S
Nitrotoluene (2-, 3-, 4-)	Explosive	NC	800	Calculated Subpart S
RDX	Explosive	NC	64	Calculated Subpart S
Tetryl	Explosive	NC	800	Calculated Subpart S
1,3,5-Trinitrobenzene	Explosive	NC	4	Calculated Subpart S
2,4,6-Trinitrotoluene	Explosive	C	233	Calculated Subpart S
Aluminum	Metal	NC	80,000	Calculated Subpart S
Arsenic (cancer endpoint)	Metal	C & NC	30	Background ^c
Barium and compounds	Metal	NC	5,600	Calculated Subpart S
Beryllium and compounds	Metal	C	1	Background
Cadmium and compounds	Metal	NC	40	Calculated Subpart S
Chromium III and compounds	Metal	NC	80,000	Calculated Subpart S
Lead	Metal	NC	1000	PRG ^d
Mercury and compounds (inorganic)	Metal	NC	24	Calculated Subpart S
Selenium	Metal	NC	400	Calculated Subpart S
Silver and compounds	Metal	NC	400	Calculated Subpart S
Acenaphthene	PAH	NC	4,800	Calculated Subpart S
Benzo[a]anthracene	PAH	C	0.96	Calculated Subpart S
Benzo[a]pyrene	PAH	C	0.10	Detection Limit ^e
Benzo[b]fluoranthene	PAH	C	0.96	Calculated Subpart S
Benzo[k]fluoranthene	PAH	C	10	Calculated Subpart S
Chrysene	PAH	C	96	Calculated Subpart S
Dibenz[ah]anthracene	PAH	C	0.96	Calculated Subpart S
Fluoranthene	PAH	NC	3,200	Calculated Subpart S
Fluorene	PAH	NC	3,200	Calculated Subpart S
Indeno[1,2,3-cd]pyrene	PAH	C	-	NA
Naphthalene	PAH	NC	3,200	Calculated Subpart S
Pyrene	PAH	NC	2,400	Calculated Subpart S
Total Petroleum Hydrocarbons as Diesel (TPH-d)	PAH	C	100	NDEP Level Clean-up ^f
Polychlorinated biphenyls (PCBs)	PCBs	C	25	TSCA ^g
Bis(2-ethylhexyl)phthalate (DEHP)	SVOC	C	1,600	Calculated Subpart S
Bromoform (tribromomethane)	SVOC	C	89	Calculated Subpart S

Proposed Closure Goals
Hawthorne Army Depot
Hawthorne, Nevada

Constituent of Concern	Chemical Classification	Carcinogenic (C) or Non-carcinogenic (NC)	NWAD Proposed Closure Goals for Soil (mg/kg)	NWAD Proposed Closure Goal Source
Butyl benzyl phthalate	SVOC	NC	16,000	Calculated Subpart S
Dibromochloromethane	SVOC	C	83	Calculated Subpart S
Dibutyl-phthalate	SVOC	NC	8,000	Calculated Subpart S
Diethyl phthalate	SVOC	NC	64,000	Calculated Subpart S
Phenanthrene	SVOC	-	-	NA
Phenol	SVOC	NC	48,000	Calculated Subpart S
Acetone	VOC	NC	800	Calculated Subpart S
Anthracene	VOC	NC	24,000	Calculated Subpart S
Benzene	VOC	C	24	Calculated Subpart S
Bis(2-chloroisopropyl)ether	VOC	C	3,200	Calculated Subpart S
Bromomethane	VOC	NC	112	Calculated Subpart S
Carbon tetrachloride	VOC	C	5	Calculated Subpart S
Chlorobenzene	VOC	NC	1,600	Calculated Subpart S
Chloroform	VOC	C	115	Calculated Subpart S
Chloromethane	VOC	C	538	Calculated Subpart S
Dibromomethane	VOC	C	0.008	Calculated Subpart S
1,2-Dichlorobenzene	VOC	NC	7,200	Calculated Subpart S
1,4-Dichlorobenzene	VOC	C	18,300	Calculated Subpart S
Dichlorodifluoromethane	VOC	C	16,000	Calculated Subpart S
Ethylbenzene	VOC	NC	8,000	Calculated Subpart S
Methylene bromide	VOC	NC	800	Calculated Subpart S
Methylene chloride	VOC	C	4,800	Calculated Subpart S
2-Methylnaphthalene	VOC	-	-	NA
1,1,2,2-Tetrachloroethane	VOC	C	35	Calculated Subpart S
Tetrachloroethylene (PCE)	VOC	C & NC	800	Calculated Subpart S
Toluene	VOC	NC	16,000	Calculated Subpart S
1,1,1-Trichloroethane	VOC	NC	7,200	Calculated Subpart S
Trichloroethylene (TCE)	VOC	C & NC	480	Calculated Subpart S
Trichlorofluoromethane	VOC	NC	24,000	Calculated Subpart S
1,2,3-Trichloropropane	VOC	C	480	Calculated Subpart S
Vinyl chloride	VOC	C	0.37	Calculated Subpart S
Xylene Total (m-, o-, p-)	VOC	NC	160,000	Calculated Subpart S
2,3,7,8-TCDD	Dioxin	C	0.000005	Calculated Subpart S

^a RCRA 55 FR 30870

^b Not available

^c Highest background concentration detected in 50 background soil samples

^d Smucker, Stanford J. USEPA Region IX, Preliminary Remedial Goals, Second Half, Sep. 1995

^e Method detection limit for Volatile Organic Compounds by EPA Method 8260 or

Semi-Volatile Organic Compounds analyzed by EPA Method 8270

^f Nevada Division of Environmental Protection

^g Cleanup level for PCB spills in accordance with Toxic Substance and Control Act Spill Policy Guidelines 40 CFR 761

Appendix B

Summary Table of Analytical Data

SWMU J09 - Dock 5/Landfill

Hawthorne Army Depot

Hawthorne, Nevada

January 1996

FINAL

FINAL

Sample ID	Sample Depth (ft)	Sample Date	Method	Analyte	Value	Units	Flag
J09-SB01-1-ER	n/a	8/18/94	8260	1,1,1,2-Tetrachloroethane	< 0.2	ug/L	
J09-SB01-1-ER	n/a	8/18/94	8260	1,1,1-Trichloroethane	3.1	ug/L	
J09-SB01-1-ER	n/a	8/18/94	8260	1,1,2,2-Tetrachloroethane	< 0.07	ug/L	
J09-SB01-1-ER	n/a	8/18/94	8260	1,1,2-Trichloroethane	< 0.2	ug/L	
J09-SB01-1-ER	n/a	8/18/94	8260	1,1-Dichloroethane	< 0.08	ug/L	
J09-SB01-1-ER	n/a	8/18/94	8260	1,1-Dichloroethene	< 0.06	ug/L	
J09-SB01-1-ER	n/a	8/18/94	8260	1,2,3-Trichloropropane	< 0.4	ug/L	
J09-SB01-1-ER	n/a	8/18/94	8260	1,2-Dichlorobenzene	< 0.09	ug/L	
J09-SB01-1-ER	n/a	8/18/94	8260	1,2-Dichloroethane	< 0.3	ug/L	
J09-SB01-1-ER	n/a	8/18/94	8260	1,2-Dichloropropane	< 0.4	ug/L	
J09-SB01-1-ER	n/a	8/18/94	8260	1,3-Dichlorobenzene	< 0.1	ug/L	
J09-SB01-1-ER	n/a	8/18/94	8260	1,4-Dichlorobenzene	< 0.2	ug/L	
J09-SB01-1-ER	n/a	8/18/94	8260	2-Chloroethylvinylether	< 0.3	ug/L	
J09-SB01-1-ER	n/a	8/18/94	8260	Benzene	< 0.1	ug/L	
J09-SB01-1-ER	n/a	8/18/94	8260	Benzyl chloride	< 0.3	ug/L	
J09-SB01-1-ER	n/a	8/18/94	8260	Bromobenzene	< 0.2	ug/L	
J09-SB01-1-ER	n/a	8/18/94	8260	Bromodichloromethane	< 0.09	ug/L	
J09-SB01-1-ER	n/a	8/18/94	8260	Bromoform	< 0.07	ug/L	
J09-SB01-1-ER	n/a	8/18/94	8260	Bromomethane	< 0.1	ug/L	
J09-SB01-1-ER	n/a	8/18/94	8260	Carbon Tetrachloride	< 0.3	ug/L	
J09-SB01-1-ER	n/a	8/18/94	8260	Chlorobenzene	< 0.07	ug/L	
J09-SB01-1-ER	n/a	8/18/94	8260	Chloroethane	< 0.1	ug/L	
J09-SB01-1-ER	n/a	8/18/94	8260	Chloroform	< 0.1	ug/L	
J09-SB01-1-ER	n/a	8/18/94	8260	Chloromethane	< 0.3	ug/L	
J09-SB01-1-ER	n/a	8/18/94	8260	cis-1,3-Dichloropropene	< 0.06	ug/L	
J09-SB01-1-ER	n/a	8/18/94	8260	Dibromochloromethane	< 0.3	ug/L	
J09-SB01-1-ER	n/a	8/18/94	8260	Dibromomethane	< 0.1	ug/L	
J09-SB01-1-ER	n/a	8/18/94	8260	Dichlorodifluoromethane	< 0.05	ug/L	
J09-SB01-1-ER	n/a	8/18/94	8260	Ethylbenzene	< 0.09	ug/L	
J09-SB01-1-ER	n/a	8/18/94	8260	Methylene chloride	1.8	ug/L	J
J09-SB01-1-ER	n/a	8/18/94	8260	Tetrachloroethene	< 0.3	ug/L	
J09-SB01-1-ER	n/a	8/18/94	8260	Toluene	< 0.2	ug/L	
J09-SB01-1-ER	n/a	8/18/94	8260	Total Xylene Isomers	< 0.3	ug/L	
J09-SB01-1-ER	n/a	8/18/94	8260	trans-1,2-Dichloroethene	< 0.1	ug/L	
J09-SB01-1-ER	n/a	8/18/94	8260	trans-1,3-Dichloropropene	< 0.09	ug/L	
J09-SB01-1-ER	n/a	8/18/94	8260	Trichloroethene	< 0.5	ug/L	
J09-SB01-1-ER	n/a	8/18/94	8260	Trichlorofluoromethane	< 0.05	ug/L	
J09-SB01-1-ER	n/a	8/18/94	8260	Vinyl chloride	< 0.07	ug/L	

J09-SB01-1-S	10.25-10.5	8/18/94	6010	Arsenic	9.1	mg/kg	J
J09-SB01-1-S	10.25-10.5	8/18/94	6010	Barium	52	mg/kg	
J09-SB01-1-S	10.25-10.5	8/18/94	6010	Cadmium	0.99	mg/kg	
J09-SB01-1-S	10.25-10.5	8/18/94	6010	Chromium	5.3	mg/kg	
J09-SB01-1-S	10.25-10.5	8/18/94	6010	Lead	8	mg/kg	J
J09-SB01-1-S	10.25-10.5	8/18/94	6010	Selenium	< 5	mg/kg	



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Sample ID	Sample Depth (ft)	Sample Date	Method	Analyte	Value	Units	Flag
J09-SB01-1-S	10.25-10.5	8/18/94	6010	Silver	< 0.9	mg/kg	
J09-SB01-1-S	10.25-10.5	8/18/94	7471	Mercury	< 0.04	mg/kg	
J09-SB01-1-S	10.5-10.75	8/18/94	8015M	TPH (as diesel)	< 1	mg/kg	
J09-SB01-1-S	10.75-11.0	8/18/94	8260	1,1,1,2-Tetrachloroethane	< 0.4	ug/kg	
J09-SB01-1-S	10.75-11.0	8/18/94	8260	1,1,1-Trichloroethane	< 0.6	ug/kg	
J09-SB01-1-S	10.75-11.0	8/18/94	8260	1,1,2,2-Tetrachloroethane	< 0.2	ug/kg	
J09-SB01-1-S	10.75-11.0	8/18/94	8260	1,1,2-Trichloroethane	< 0.4	ug/kg	
J09-SB01-1-S	10.75-11.0	8/18/94	8260	1,1-Dichloroethane	< 0.2	ug/kg	
J09-SB01-1-S	10.75-11.0	8/18/94	8260	1,1-Dichloroethene	< 0.2	ug/kg	
J09-SB01-1-S	10.75-11.0	8/18/94	8260	1,2,3-Trichloropropane	< 0.8	ug/kg	
J09-SB01-1-S	10.75-11.0	8/18/94	8260	1,2-Dichlorobenzene	< 0.2	ug/kg	
J09-SB01-1-S	10.75-11.0	8/18/94	8260	1,2-Dichloroethane	< 0.6	ug/kg	
J09-SB01-1-S	10.75-11.0	8/18/94	8260	1,2-Dichloropropane	< 0.8	ug/kg	
J09-SB01-1-S	10.75-11.0	8/18/94	8260	1,3-Dichlorobenzene	< 0.2	ug/kg	
J09-SB01-1-S	10.75-11.0	8/18/94	8260	1,4-Dichlorobenzene	< 0.4	ug/kg	
J09-SB01-1-S	10.75-11.0	8/18/94	8260	2-Chloroethylvinylether	< 0.6	ug/kg	
J09-SB01-1-S	10.75-11.0	8/18/94	8260	Benzene	< 0.2	ug/kg	
J09-SB01-1-S	10.75-11.0	8/18/94	8260	Benzyl chloride	< 0.6	ug/kg	
J09-SB01-1-S	10.75-11.0	8/18/94	8260	Bromobenzene	< 0.4	ug/kg	
J09-SB01-1-S	10.75-11.0	8/18/94	8260	Bromodichloromethane	< 0.2	ug/kg	
J09-SB01-1-S	10.75-11.0	8/18/94	8260	Bromoform	< 0.2	ug/kg	
J09-SB01-1-S	10.75-11.0	8/18/94	8260	Bromomethane	< 0.2	ug/kg	
J09-SB01-1-S	10.75-11.0	8/18/94	8260	Carbon Tetrachloride	< 0.6	ug/kg	
J09-SB01-1-S	10.75-11.0	8/18/94	8260	Chlorobenzene	< 0.2	ug/kg	
J09-SB01-1-S	10.75-11.0	8/18/94	8260	Chloroethane	< 0.2	ug/kg	
J09-SB01-1-S	10.75-11.0	8/18/94	8260	Chloroform	< 0.2	ug/kg	
J09-SB01-1-S	10.75-11.0	8/18/94	8260	Chloromethane	< 0.6	ug/kg	
J09-SB01-1-S	10.75-11.0	8/18/94	8260	cis-1,3-Dichloropropene	< 0.2	ug/kg	
J09-SB01-1-S	10.75-11.0	8/18/94	8260	Dibromochloromethane	< 0.6	ug/kg	
J09-SB01-1-S	10.75-11.0	8/18/94	8260	Dibromomethane	< 0.2	ug/kg	
J09-SB01-1-S	10.75-11.0	8/18/94	8260	Dichlorodifluoromethane	< 0.1	ug/kg	
J09-SB01-1-S	10.75-11.0	8/18/94	8260	Ethylbenzene	< 0.2	ug/kg	
J09-SB01-1-S	10.75-11.0	8/18/94	8260	Methylene chloride	< 0.4	ug/kg	
J09-SB01-1-S	10.75-11.0	8/18/94	8260	Tetrachloroethene	< 0.6	ug/kg	
J09-SB01-1-S	10.75-11.0	8/18/94	8260	Toluene	< 0.4	ug/kg	
J09-SB01-1-S	10.75-11.0	8/18/94	8260	Total Xylene Isomers	< 0.6	ug/kg	
J09-SB01-1-S	10.75-11.0	8/18/94	8260	trans-1,2-Dichloroethene	< 0.2	ug/kg	
J09-SB01-1-S	10.75-11.0	8/18/94	8260	trans-1,3-Dichloropropene	< 0.2	ug/kg	
J09-SB01-1-S	10.75-11.0	8/18/94	8260	Trichloroethene	< 1	ug/kg	
J09-SB01-1-S	10.75-11.0	8/18/94	8260	Trichlorofluoromethane	< 0.1	ug/kg	
J09-SB01-1-S	10.75-11.0	8/18/94	8260	Vinyl chloride	< 0.2	ug/kg	
J09-SB01-1-S	10.5-10.75	8/18/94	D2216	Moisture/TNFR	5.2	percent	
J09-SB01-1-S	10.5-10.75	8/18/94	D2216	Moisture/TNFR	4	percent	

J09-SB01-1-SD (DP221)	12.75-13.0	8/18/94	6010	Arsenic	9.9	mg/kg	J
J09-SB01-1-SD (DP221)	12.75-13.0	8/18/94	6010	Barium	120	mg/kg	

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Sample ID	Sample Depth (ft)	Sample Date	Method	Analyte	Value	Units	Flag
J09-SB01-1-SD (DP221)	12.75-13.0	8/18/94	6010	Cadmium	2.2	mg/kg	
J09-SB01-1-SD (DP221)	12.75-13.0	8/18/94	6010	Chromium	11	mg/kg	
J09-SB01-1-SD (DP221)	12.75-13.0	8/18/94	6010	Lead	13	mg/kg	J
J09-SB01-1-SD (DP221)	12.75-13.0	8/18/94	6010	Selenium	7.8	mg/kg	J
J09-SB01-1-SD (DP221)	12.75-13.0	8/18/94	6010	Silver	< 1	mg/kg	
J09-SB01-1-SD (DP221)	12.75-13.0	8/18/94	7471	Mercury	< 0.04	mg/kg	
J09-SB01-1-SD (DP222)	12.5-12.75	8/18/94	8015M	TPH (as diesel)	< 1	mg/kg	
J09-SB01-1-SD (DP223)	11.75-12.0	8/18/94	8260	1,1,1,2-Tetrachloroethane	< 0.4	ug/kg	
J09-SB01-1-SD (DP223)	11.75-12.0	8/18/94	8260	1,1,1-Trichloroethane	< 0.6	ug/kg	
J09-SB01-1-SD (DP223)	11.75-12.0	8/18/94	8260	1,1,2,2-Tetrachloroethane	< 0.2	ug/kg	
J09-SB01-1-SD (DP223)	11.75-12.0	8/18/94	8260	1,1,2-Trichloroethane	< 0.4	ug/kg	
J09-SB01-1-SD (DP223)	11.75-12.0	8/18/94	8260	1,1-Dichloroethane	< 0.2	ug/kg	
J09-SB01-1-SD (DP223)	11.75-12.0	8/18/94	8260	1,1-Dichloroethene	< 0.2	ug/kg	
J09-SB01-1-SD (DP223)	11.75-12.0	8/18/94	8260	1,2,3-Trichloropropane	< 0.8	ug/kg	
J09-SB01-1-SD (DP223)	11.75-12.0	8/18/94	8260	1,2-Dichlorobenzene	< 0.2	ug/kg	
J09-SB01-1-SD (DP223)	11.75-12.0	8/18/94	8260	1,2-Dichloroethane	< 0.6	ug/kg	
J09-SB01-1-SD (DP223)	11.75-12.0	8/18/94	8260	1,2-Dichloropropane	< 0.8	ug/kg	
J09-SB01-1-SD (DP223)	11.75-12.0	8/18/94	8260	1,3-Dichlorobenzene	< 0.2	ug/kg	
J09-SB01-1-SD (DP223)	11.75-12.0	8/18/94	8260	1,4-Dichlorobenzene	< 0.4	ug/kg	
J09-SB01-1-SD (DP223)	11.75-12.0	8/18/94	8260	2-Chloroethylvinylether	< 0.6	ug/kg	
J09-SB01-1-SD (DP223)	11.75-12.0	8/18/94	8260	Benzene	< 0.2	ug/kg	
J09-SB01-1-SD (DP223)	11.75-12.0	8/18/94	8260	Benzyl chloride	< 0.6	ug/kg	
J09-SB01-1-SD (DP223)	11.75-12.0	8/18/94	8260	Bromobenzene	< 0.4	ug/kg	
J09-SB01-1-SD (DP223)	11.75-12.0	8/18/94	8260	Bromodichloromethane	< 0.2	ug/kg	
J09-SB01-1-SD (DP223)	11.75-12.0	8/18/94	8260	Bromoform	< 0.2	ug/kg	
J09-SB01-1-SD (DP223)	11.75-12.0	8/18/94	8260	Bromomethane	< 0.2	ug/kg	
J09-SB01-1-SD (DP223)	11.75-12.0	8/18/94	8260	Carbon Tetrachloride	< 0.6	ug/kg	
J09-SB01-1-SD (DP223)	11.75-12.0	8/18/94	8260	Chlorobenzene	< 0.2	ug/kg	
J09-SB01-1-SD (DP223)	11.75-12.0	8/18/94	8260	Chloroethane	< 0.2	ug/kg	
J09-SB01-1-SD (DP223)	11.75-12.0	8/18/94	8260	Chloroform	< 0.2	ug/kg	
J09-SB01-1-SD (DP223)	11.75-12.0	8/18/94	8260	Chloromethane	< 0.6	ug/kg	
J09-SB01-1-SD (DP223)	11.75-12.0	8/18/94	8260	cis-1,3-Dichloropropene	< 0.2	ug/kg	
J09-SB01-1-SD (DP223)	11.75-12.0	8/18/94	8260	Dibromochloromethane	< 0.6	ug/kg	
J09-SB01-1-SD (DP223)	11.75-12.0	8/18/94	8260	Dibromomethane	< 0.2	ug/kg	
J09-SB01-1-SD (DP223)	11.75-12.0	8/18/94	8260	Dichlorodifluoromethane	< 0.1	ug/kg	
J09-SB01-1-SD (DP223)	11.75-12.0	8/18/94	8260	Ethylbenzene	< 0.2	ug/kg	
J09-SB01-1-SD (DP223)	11.75-12.0	8/18/94	8260	Methylene chloride	< 0.4	ug/kg	
J09-SB01-1-SD (DP223)	11.75-12.0	8/18/94	8260	Tetrachloroethene	< 0.6	ug/kg	
J09-SB01-1-SD (DP223)	11.75-12.0	8/18/94	8260	Toluene	< 0.4	ug/kg	
J09-SB01-1-SD (DP223)	11.75-12.0	8/18/94	8260	Total Xylene Isomers	< 0.6	ug/kg	
J09-SB01-1-SD (DP223)	11.75-12.0	8/18/94	8260	trans-1,2-Dichloroethene	< 0.2	ug/kg	
J09-SB01-1-SD (DP223)	11.75-12.0	8/18/94	8260	trans-1,3-Dichloropropene	< 0.2	ug/kg	
J09-SB01-1-SD (DP223)	11.75-12.0	8/18/94	8260	Trichloroethene	< 1	ug/kg	
J09-SB01-1-SD (DP223)	11.75-12.0	8/18/94	8260	Trichlorofluoromethane	< 0.1	ug/kg	R
J09-SB01-1-SD (DP223)	11.75-12.0	8/18/94	8260	Vinyl chloride	< 0.2	ug/kg	
J09-SB01-1-SD (DP221)	12.75-13.0	8/18/94	D2216	Moisture/TNFR	8.2	percent	



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Sample ID	Sample Depth (ft)	Sample Date	Method	Analyte	Value	Units	Flag
J09-SB01-1-SD (DP223)	11.75-12.0	8/18/94	D2216	Moisture/TNFR	3.5	percent	

J09-SB02-1-S	9.75-10.0	8/18/94	6010	Arsenic	6.4	mg/kg	J
J09-SB02-1-S	9.75-10.0	8/18/94	6010	Barium	470	mg/kg	
J09-SB02-1-S	9.75-10.0	8/18/94	6010	Cadmium	1.8	mg/kg	
J09-SB02-1-S	9.75-10.0	8/18/94	6010	Chromium	12	mg/kg	
J09-SB02-1-S	9.75-10.0	8/18/94	6010	Lead	9.4	mg/kg	J
J09-SB02-1-S	9.75-10.0	8/18/94	6010	Selenium	< 5	mg/kg	
J09-SB02-1-S	9.75-10.0	8/18/94	6010	Silver	< 1	mg/kg	
J09-SB02-1-S	9.75-10.0	8/18/94	7471	Mercury	< 0.04	mg/kg	
J09-SB02-1-S	10.0-10.25	8/18/94	8015M	TPH (as diesel)	< 1	mg/kg	
J09-SB02-1-S	10.25-10.5	8/18/94	8260	1,1,1,2-Tetrachloroethane	< 0.4	ug/kg	
J09-SB02-1-S	10.25-10.5	8/18/94	8260	1,1,1-Trichloroethane	< 0.6	ug/kg	
J09-SB02-1-S	10.25-10.5	8/18/94	8260	1,1,2,2-Tetrachloroethane	< 0.2	ug/kg	
J09-SB02-1-S	10.25-10.5	8/18/94	8260	1,1,2-Trichloroethane	< 0.4	ug/kg	
J09-SB02-1-S	10.25-10.5	8/18/94	8260	1,1-Dichloroethane	< 0.2	ug/kg	
J09-SB02-1-S	10.25-10.5	8/18/94	8260	1,1-Dichloroethene	< 0.2	ug/kg	
J09-SB02-1-S	10.25-10.5	8/18/94	8260	1,2,3-Trichloropropane	< 0.8	ug/kg	
J09-SB02-1-S	10.25-10.5	8/18/94	8260	1,2-Dichlorobenzene	< 0.2	ug/kg	
J09-SB02-1-S	10.25-10.5	8/18/94	8260	1,2-Dichloroethane	< 0.6	ug/kg	
J09-SB02-1-S	10.25-10.5	8/18/94	8260	1,2-Dichloropropane	< 0.8	ug/kg	
J09-SB02-1-S	10.25-10.5	8/18/94	8260	1,3-Dichlorobenzene	< 0.2	ug/kg	
J09-SB02-1-S	10.25-10.5	8/18/94	8260	1,4-Dichlorobenzene	< 0.4	ug/kg	
J09-SB02-1-S	10.25-10.5	8/18/94	8260	2-Chloroethylvinylether	< 0.6	ug/kg	
J09-SB02-1-S	10.25-10.5	8/18/94	8260	Benzene	< 0.2	ug/kg	
J09-SB02-1-S	10.25-10.5	8/18/94	8260	Benzyl chloride	< 0.6	ug/kg	
J09-SB02-1-S	10.25-10.5	8/18/94	8260	Bromobenzene	< 0.4	ug/kg	
J09-SB02-1-S	10.25-10.5	8/18/94	8260	Bromodichloromethane	< 0.2	ug/kg	
J09-SB02-1-S	10.25-10.5	8/18/94	8260	Bromoform	< 0.2	ug/kg	
J09-SB02-1-S	10.25-10.5	8/18/94	8260	Bromomethane	< 0.2	ug/kg	
J09-SB02-1-S	10.25-10.5	8/18/94	8260	Carbon Tetrachloride	< 0.6	ug/kg	
J09-SB02-1-S	10.25-10.5	8/18/94	8260	Chlorobenzene	< 0.2	ug/kg	
J09-SB02-1-S	10.25-10.5	8/18/94	8260	Chloroethane	< 0.2	ug/kg	
J09-SB02-1-S	10.25-10.5	8/18/94	8260	Chloroform	< 0.2	ug/kg	
J09-SB02-1-S	10.25-10.5	8/18/94	8260	Chloromethane	< 0.6	ug/kg	
J09-SB02-1-S	10.25-10.5	8/18/94	8260	cis-1,3-Dichloropropene	< 0.2	ug/kg	
J09-SB02-1-S	10.25-10.5	8/18/94	8260	Dibromochloromethane	< 0.6	ug/kg	
J09-SB02-1-S	10.25-10.5	8/18/94	8260	Dibromomethane	< 0.2	ug/kg	
J09-SB02-1-S	10.25-10.5	8/18/94	8260	Dichlorodifluoromethane	< 0.1	ug/kg	
J09-SB02-1-S	10.25-10.5	8/18/94	8260	Ethylbenzene	< 0.2	ug/kg	
J09-SB02-1-S	10.25-10.5	8/18/94	8260	Methylene chloride	< 0.4	ug/kg	
J09-SB02-1-S	10.25-10.5	8/18/94	8260	Tetrachloroethene	< 0.6	ug/kg	
J09-SB02-1-S	10.25-10.5	8/18/94	8260	Toluene	< 0.4	ug/kg	
J09-SB02-1-S	10.25-10.5	8/18/94	8260	Total Xylene Isomers	< 0.6	ug/kg	
J09-SB02-1-S	10.25-10.5	8/18/94	8260	trans-1,2-Dichloroethene	< 0.2	ug/kg	
J09-SB02-1-S	10.25-10.5	8/18/94	8260	trans-1,3-Dichloropropene	< 0.2	ug/kg	



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Sample ID	Sample Depth (ft)	Sample Date	Method	Analyte	Value	Units	Flag
J09-SB02-1-S	10.25-10.5	8/18/94	8260	Trichloroethene	< 1	ug/kg	
J09-SB02-1-S	10.25-10.5	8/18/94	8260	Trichlorofluoromethane	< 0.1	ug/kg	R
J09-SB02-1-S	10.25-10.5	8/18/94	8260	Vinyl chloride	< 0.2	ug/kg	
J09-SB02-1-S	10.0-10.25	8/18/94	D2216	Moisture/TNFR	9	percent	
J09-SB02-1-S	10.0-10.25	8/18/94	D2216	Moisture/TNFR	8.7	percent	

J09-SB02-2-S	14.25-14.5	8/18/94	6010	Arsenic	7.9	mg/kg	J
J09-SB02-2-S	14.25-14.5	8/18/94	6010	Barium	130	mg/kg	
J09-SB02-2-S	14.25-14.5	8/18/94	6010	Cadmium	1.9	mg/kg	
J09-SB02-2-S	14.25-14.5	8/18/94	6010	Chromium	9.8	mg/kg	
J09-SB02-2-S	14.25-14.5	8/18/94	6010	Lead	12	mg/kg	J
J09-SB02-2-S	14.25-14.5	8/18/94	6010	Selenium	< 5	mg/kg	
J09-SB02-2-S	14.25-14.5	8/18/94	6010	Silver	< 1	mg/kg	
J09-SB02-2-S	14.25-14.5	8/18/94	7471	Mercury	< 0.04	mg/kg	
J09-SB02-2-S	14.5-14.75	8/18/94	8015M	TPH (as diesel)	< 1	mg/kg	
J09-SB02-2-S	14.75-15.0	8/18/94	8260	1,1,1,2-Tetrachloroethane	< 0.4	ug/kg	
J09-SB02-2-S	14.75-15.0	8/18/94	8260	1,1,1-Trichloroethane	< 0.6	ug/kg	
J09-SB02-2-S	14.75-15.0	8/18/94	8260	1,1,2,2-Tetrachloroethane	< 0.2	ug/kg	
J09-SB02-2-S	14.75-15.0	8/18/94	8260	1,1,2-Trichloroethane	< 0.4	ug/kg	
J09-SB02-2-S	14.75-15.0	8/18/94	8260	1,1-Dichloroethane	< 0.2	ug/kg	
J09-SB02-2-S	14.75-15.0	8/18/94	8260	1,1-Dichloroethene	< 0.2	ug/kg	
J09-SB02-2-S	14.75-15.0	8/18/94	8260	1,2,3-Trichloropropane	< 0.8	ug/kg	
J09-SB02-2-S	14.75-15.0	8/18/94	8260	1,2-Dichlorobenzene	< 0.2	ug/kg	
J09-SB02-2-S	14.75-15.0	8/18/94	8260	1,2-Dichloroethane	< 0.6	ug/kg	
J09-SB02-2-S	14.75-15.0	8/18/94	8260	1,2-Dichloropropane	< 0.8	ug/kg	
J09-SB02-2-S	14.75-15.0	8/18/94	8260	1,3-Dichlorobenzene	< 0.2	ug/kg	
J09-SB02-2-S	14.75-15.0	8/18/94	8260	1,4-Dichlorobenzene	< 0.4	ug/kg	
J09-SB02-2-S	14.75-15.0	8/18/94	8260	2-Chloroethylvinylether	< 0.6	ug/kg	
J09-SB02-2-S	14.75-15.0	8/18/94	8260	Benzene	< 0.2	ug/kg	
J09-SB02-2-S	14.75-15.0	8/18/94	8260	Benzyl chloride	< 0.6	ug/kg	
J09-SB02-2-S	14.75-15.0	8/18/94	8260	Bromobenzene	< 0.4	ug/kg	
J09-SB02-2-S	14.75-15.0	8/18/94	8260	Bromodichloromethane	< 0.2	ug/kg	
J09-SB02-2-S	14.75-15.0	8/18/94	8260	Bromoform	< 0.2	ug/kg	
J09-SB02-2-S	14.75-15.0	8/18/94	8260	Bromomethane	< 0.2	ug/kg	
J09-SB02-2-S	14.75-15.0	8/18/94	8260	Carbon Tetrachloride	< 0.6	ug/kg	
J09-SB02-2-S	14.75-15.0	8/18/94	8260	Chlorobenzene	< 0.2	ug/kg	
J09-SB02-2-S	14.75-15.0	8/18/94	8260	Chloroethane	< 0.2	ug/kg	
J09-SB02-2-S	14.75-15.0	8/18/94	8260	Chloroform	< 0.2	ug/kg	
J09-SB02-2-S	14.75-15.0	8/18/94	8260	Chloromethane	< 0.6	ug/kg	
J09-SB02-2-S	14.75-15.0	8/18/94	8260	cis-1,3-Dichloropropene	< 0.2	ug/kg	
J09-SB02-2-S	14.75-15.0	8/18/94	8260	Dibromochloromethane	< 0.6	ug/kg	
J09-SB02-2-S	14.75-15.0	8/18/94	8260	Dibromomethane	< 0.2	ug/kg	
J09-SB02-2-S	14.75-15.0	8/18/94	8260	Dichlorodifluoromethane	< 0.1	ug/kg	
J09-SB02-2-S	14.75-15.0	8/18/94	8260	Ethylbenzene	< 0.2	ug/kg	
J09-SB02-2-S	14.75-15.0	8/18/94	8260	Methylene chloride	< 0.4	ug/kg	
J09-SB02-2-S	14.75-15.0	8/18/94	8260	Tetrachloroethene	< 0.6	ug/kg	



Summary Table of Analytical Data

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Sample ID	Sample Depth (ft)	Sample Date	Method	Analyte	Value	Units	Flag
J09-SB02-2-S	14.75-15.0	8/18/94	8260	Toluene	< 0.4	ug/kg	
J09-SB02-2-S	14.75-15.0	8/18/94	8260	Total Xylene Isomers	< 0.6	ug/kg	
J09-SB02-2-S	14.75-15.0	8/18/94	8260	trans-1,2-Dichloroethene	< 0.2	ug/kg	
J09-SB02-2-S	14.75-15.0	8/18/94	8260	trans-1,3-Dichloropropene	< 0.2	ug/kg	
J09-SB02-2-S	14.75-15.0	8/18/94	8260	Trichloroethene	< 1	ug/kg	
J09-SB02-2-S	14.75-15.0	8/18/94	8260	Trichlorofluoromethane	< 0.1	ug/kg	R
J09-SB02-2-S	14.75-15.0	8/18/94	8260	Vinyl chloride	< 0.2	ug/kg	
J09-SB02-2-S	14.5-14.75	8/18/94	D2216	Moisture/TNFR	8.2	percent	
J09-SB02-2-S	14.5-14.75	8/18/94	D2216	Moisture/TNFR	7.4	percent	

J09-SG01	5.0	6/25/94	M8010	1,1,1-Trichloroethane	< 1	ug/L	
J09-SG01	5.0	6/25/94	M8010	1,1,2-Trichloroethane	< 1	ug/L	
J09-SG01	5.0	6/25/94	M8010	1,1-Dichloroethane	< 1	ug/L	
J09-SG01	5.0	6/25/94	M8010	1,1-Dichloroethene	< 1	ug/L	
J09-SG01	5.0	6/25/94	M8010	Carbon Tetrachloride	< 1	ug/L	
J09-SG01	5.0	6/25/94	M8010	Chloroform	< 1	ug/L	
J09-SG01	5.0	6/25/94	M8010	cis-1,2-Dichloroethene	< 1	ug/L	
J09-SG01	5.0	6/25/94	M8010	Methylene Chloride	< 1	ug/L	
J09-SG01	5.0	6/25/94	M8010	Tetrachloroethene	< 1	ug/L	
J09-SG01	5.0	6/25/94	M8010	trans-1,2-Dichloroethene	< 1	ug/L	
J09-SG01	5.0	6/25/94	M8010	Trichloroethene	< 1	ug/L	
J09-SG01	5.0	6/25/94	M8020	Benzene	< 1	ug/L	
J09-SG01	5.0	6/25/94	M8020	Ethylbenzene	< 1	ug/L	
J09-SG01	5.0	6/25/94	M8020	Toluene	< 1	ug/L	
J09-SG01	5.0	6/25/94	M8020	Total FID Volatiles	< 10	ug/L	
J09-SG01	5.0	6/25/94	M8020	Total Xylene Isomers	< 1	ug/L	

J09-SG02	5.0	6/25/94	M8010	1,1,1-Trichloroethane	< 1	ug/L	
J09-SG02	5.0	6/25/94	M8010	1,1,2-Trichloroethane	< 1	ug/L	
J09-SG02	5.0	6/25/94	M8010	1,1-Dichloroethane	< 1	ug/L	
J09-SG02	5.0	6/25/94	M8010	1,1-Dichloroethene	< 1	ug/L	
J09-SG02	5.0	6/25/94	M8010	Carbon Tetrachloride	< 1	ug/L	
J09-SG02	5.0	6/25/94	M8010	Chloroform	< 1	ug/L	
J09-SG02	5.0	6/25/94	M8010	cis-1,2-Dichloroethene	< 1	ug/L	
J09-SG02	5.0	6/25/94	M8010	Methylene Chloride	< 1	ug/L	
J09-SG02	5.0	6/25/94	M8010	Tetrachloroethene	< 1	ug/L	
J09-SG02	5.0	6/25/94	M8010	trans-1,2-Dichloroethene	< 1	ug/L	
J09-SG02	5.0	6/25/94	M8010	Trichloroethene	< 1	ug/L	
J09-SG02	5.0	6/25/94	M8020	Benzene	< 1	ug/L	
J09-SG02	5.0	6/25/94	M8020	Ethylbenzene	< 1	ug/L	
J09-SG02	5.0	6/25/94	M8020	Toluene	< 1	ug/L	
J09-SG02	5.0	6/25/94	M8020	Total FID Volatiles	< 10	ug/L	
J09-SG02	5.0	6/25/94	M8020	Total Xylene Isomers	< 1	ug/L	

J09-SG03	5.0	6/25/94	M8010	1,1,1-Trichloroethane	< 1	ug/L	
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Sample ID	Sample Depth (ft)	Sample Date	Method	Analyte	Value	Units	Flag
J09-SG03	5.0	6/25/94	M8010	1,1,2-Trichloroethane	< 1	ug/L	
J09-SG03	5.0	6/25/94	M8010	1,1-Dichloroethane	< 1	ug/L	
J09-SG03	5.0	6/25/94	M8010	1,1-Dichloroethene	< 1	ug/L	
J09-SG03	5.0	6/25/94	M8010	Carbon Tetrachloride	< 1	ug/L	
J09-SG03	5.0	6/25/94	M8010	Chloroform	< 1	ug/L	
J09-SG03	5.0	6/25/94	M8010	cis-1,2-Dichloroethene	< 1	ug/L	
J09-SG03	5.0	6/25/94	M8010	Methylene Chloride	< 1	ug/L	
J09-SG03	5.0	6/25/94	M8010	Tetrachloroethene	< 1	ug/L	
J09-SG03	5.0	6/25/94	M8010	trans-1,2-Dichloroethene	< 1	ug/L	
J09-SG03	5.0	6/25/94	M8010	Trichloroethene	< 1	ug/L	
J09-SG03	5.0	6/25/94	M8020	Benzene	< 1	ug/L	
J09-SG03	5.0	6/25/94	M8020	Ethylbenzene	< 1	ug/L	
J09-SG03	5.0	6/25/94	M8020	Toluene	< 1	ug/L	
J09-SG03	5.0	6/25/94	M8020	Total FID Volatiles	< 10	ug/L	
J09-SG03	5.0	6/25/94	M8020	Total Xylene Isomers	< 1	ug/L	

J09-SG04	5.0	6/25/94	M8010	1,1,1-Trichloroethane	< 1	ug/L	
J09-SG04	5.0	6/25/94	M8010	1,1,2-Trichloroethane	< 1	ug/L	
J09-SG04	5.0	6/25/94	M8010	1,1-Dichloroethane	< 1	ug/L	
J09-SG04	5.0	6/25/94	M8010	1,1-Dichloroethene	< 1	ug/L	
J09-SG04	5.0	6/25/94	M8010	Carbon Tetrachloride	< 1	ug/L	
J09-SG04	5.0	6/25/94	M8010	Chloroform	< 1	ug/L	
J09-SG04	5.0	6/25/94	M8010	cis-1,2-Dichloroethene	< 1	ug/L	
J09-SG04	5.0	6/25/94	M8010	Methylene Chloride	< 1	ug/L	
J09-SG04	5.0	6/25/94	M8010	Tetrachloroethene	< 1	ug/L	
J09-SG04	5.0	6/25/94	M8010	trans-1,2-Dichloroethene	< 1	ug/L	
J09-SG04	5.0	6/25/94	M8010	Trichloroethene	< 1	ug/L	
J09-SG04	5.0	6/25/94	M8020	Benzene	< 1	ug/L	
J09-SG04	5.0	6/25/94	M8020	Ethylbenzene	< 1	ug/L	
J09-SG04	5.0	6/25/94	M8020	Toluene	< 1	ug/L	
J09-SG04	5.0	6/25/94	M8020	Total FID Volatiles	< 10	ug/L	
J09-SG04	5.0	6/25/94	M8020	Total Xylene Isomers	< 1	ug/L	

J09-SG05	5.0	6/25/94	M8010	1,1,1-Trichloroethane	< 1	ug/L	
J09-SG05	5.0	6/25/94	M8010	1,1,2-Trichloroethane	< 1	ug/L	
J09-SG05	5.0	6/25/94	M8010	1,1-Dichloroethane	< 1	ug/L	
J09-SG05	5.0	6/25/94	M8010	1,1-Dichloroethene	< 1	ug/L	
J09-SG05	5.0	6/25/94	M8010	Carbon Tetrachloride	< 1	ug/L	
J09-SG05	5.0	6/25/94	M8010	Chloroform	< 1	ug/L	
J09-SG05	5.0	6/25/94	M8010	cis-1,2-Dichloroethene	< 1	ug/L	
J09-SG05	5.0	6/25/94	M8010	Methylene Chloride	< 1	ug/L	
J09-SG05	5.0	6/25/94	M8010	Tetrachloroethene	< 1	ug/L	
J09-SG05	5.0	6/25/94	M8010	trans-1,2-Dichloroethene	< 1	ug/L	
J09-SG05	5.0	6/25/94	M8010	Trichloroethene	< 1	ug/L	
J09-SG05	5.0	6/25/94	M8020	Benzene	< 1	ug/L	



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Sample ID	Sample Depth (ft)	Sample Date	Method	Analyte	Value	Units	Flag
J09-SG05	5.0	6/25/94	M8020	Ethybenzene	< 1	ug/L	
J09-SG05	5.0	6/25/94	M8020	Toluene	< 1	ug/L	
J09-SG05	5.0	6/25/94	M8020	Total FID Volatiles	< 10	ug/L	
J09-SG05	5.0	6/25/94	M8020	Total Xylene Isomers	< 1	ug/L	

J09-SG06	5.0	6/25/94	M8010	1,1,1-Trichloroethane	< 1	ug/L	
J09-SG06	5.0	6/25/94	M8010	1,1,2-Trichloroethane	< 1	ug/L	
J09-SG06	5.0	6/25/94	M8010	1,1-Dichloroethane	< 1	ug/L	
J09-SG06	5.0	6/25/94	M8010	1,1-Dichloroethene	< 1	ug/L	
J09-SG06	5.0	6/25/94	M8010	Carbon Tetrachloride	< 1	ug/L	
J09-SG06	5.0	6/25/94	M8010	Chloroform	< 1	ug/L	
J09-SG06	5.0	6/25/94	M8010	cis-1,2-Dichloroethene	< 1	ug/L	
J09-SG06	5.0	6/25/94	M8010	Methylene Chloride	< 1	ug/L	
J09-SG06	5.0	6/25/94	M8010	Tetrachloroethene	< 1	ug/L	
J09-SG06	5.0	6/25/94	M8010	trans-1,2-Dichloroethene	< 1	ug/L	
J09-SG06	5.0	6/25/94	M8010	Trichloroethene	< 1	ug/L	
J09-SG06	5.0	6/25/94	M8020	Benzene	< 1	ug/L	
J09-SG06	5.0	6/25/94	M8020	Ethybenzene	< 1	ug/L	
J09-SG06	5.0	6/25/94	M8020	Toluene	< 1	ug/L	
J09-SG06	5.0	6/25/94	M8020	Total FID Volatiles	< 10	ug/L	
J09-SG06	5.0	6/25/94	M8020	Total Xylene Isomers	< 1	ug/L	

J09-SG07	5.0	6/25/94	M8010	1,1,1-Trichloroethane	< 1	ug/L	
J09-SG07	5.0	6/25/94	M8010	1,1,2-Trichloroethane	< 1	ug/L	
J09-SG07	5.0	6/25/94	M8010	1,1-Dichloroethane	< 1	ug/L	
J09-SG07	5.0	6/25/94	M8010	1,1-Dichloroethene	< 1	ug/L	
J09-SG07	5.0	6/25/94	M8010	Carbon Tetrachloride	< 1	ug/L	
J09-SG07	5.0	6/25/94	M8010	Chloroform	< 1	ug/L	
J09-SG07	5.0	6/25/94	M8010	cis-1,2-Dichloroethene	< 1	ug/L	
J09-SG07	5.0	6/25/94	M8010	Methylene Chloride	< 1	ug/L	
J09-SG07	5.0	6/25/94	M8010	Tetrachloroethene	< 1	ug/L	
J09-SG07	5.0	6/25/94	M8010	trans-1,2-Dichloroethene	< 1	ug/L	
J09-SG07	5.0	6/25/94	M8010	Trichloroethene	< 1	ug/L	
J09-SG07	5.0	6/25/94	M8020	Benzene	< 1	ug/L	
J09-SG07	5.0	6/25/94	M8020	Ethybenzene	< 1	ug/L	
J09-SG07	5.0	6/25/94	M8020	Toluene	< 1	ug/L	
J09-SG07	5.0	6/25/94	M8020	Total FID Volatiles	< 10	ug/L	
J09-SG07	5.0	6/25/94	M8020	Total Xylene Isomers	< 1	ug/L	

J09-SG08	5.0	6/25/94	M8010	1,1,1-Trichloroethane	< 1	ug/L	
J09-SG08	5.0	6/25/94	M8010	1,1,2-Trichloroethane	< 1	ug/L	
J09-SG08	5.0	6/25/94	M8010	1,1-Dichloroethane	< 1	ug/L	
J09-SG08	5.0	6/25/94	M8010	1,1-Dichloroethene	< 1	ug/L	
J09-SG08	5.0	6/25/94	M8010	Carbon Tetrachloride	< 1	ug/L	
J09-SG08	5.0	6/25/94	M8010	Chloroform	< 1	ug/L	



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Sample ID	Sample Depth (ft)	Sample Date	Method	Analyte	Value	Units	Flag
J09-SG08	5.0	6/25/94	M8010	cis-1,2-Dichloroethene	< 1	ug/L	
J09-SG08	5.0	6/25/94	M8010	Methylene Chloride	< 1	ug/L	
J09-SG08	5.0	6/25/94	M8010	Tetrachloroethene	< 1	ug/L	
J09-SG08	5.0	6/25/94	M8010	trans-1,2-Dichloroethene	< 1	ug/L	
J09-SG08	5.0	6/25/94	M8010	Trichloroethene	< 1	ug/L	
J09-SG08	5.0	6/25/94	M8020	Benzene	< 1	ug/L	
J09-SG08	5.0	6/25/94	M8020	Ethylbenzene	< 1	ug/L	
J09-SG08	5.0	6/25/94	M8020	Toluene	< 1	ug/L	
J09-SG08	5.0	6/25/94	M8020	Total FID Volatiles	< 10	ug/L	
J09-SG08	5.0	6/25/94	M8020	Total Xylene Isomers	< 1	ug/L	

J09-SG09	5.0	6/25/94	M8010	1,1,1-Trichloroethane	< 1	ug/L	
J09-SG09	5.0	6/25/94	M8010	1,1,2-Trichloroethane	< 1	ug/L	
J09-SG09	5.0	6/25/94	M8010	1,1-Dichloroethane	< 1	ug/L	
J09-SG09	5.0	6/25/94	M8010	1,1-Dichloroethene	< 1	ug/L	
J09-SG09	5.0	6/25/94	M8010	Carbon Tetrachloride	< 1	ug/L	
J09-SG09	5.0	6/25/94	M8010	Chloroform	< 1	ug/L	
J09-SG09	5.0	6/25/94	M8010	cis-1,2-Dichloroethene	< 1	ug/L	
J09-SG09	5.0	6/25/94	M8010	Methylene Chloride	< 1	ug/L	
J09-SG09	5.0	6/25/94	M8010	Tetrachloroethene	< 1	ug/L	
J09-SG09	5.0	6/25/94	M8010	trans-1,2-Dichloroethene	< 1	ug/L	
J09-SG09	5.0	6/25/94	M8010	Trichloroethene	< 1	ug/L	
J09-SG09	5.0	6/25/94	M8020	Benzene	< 1	ug/L	
J09-SG09	5.0	6/25/94	M8020	Ethylbenzene	< 1	ug/L	
J09-SG09	5.0	6/25/94	M8020	Toluene	< 1	ug/L	
J09-SG09	5.0	6/25/94	M8020	Total FID Volatiles	< 10	ug/L	
J09-SG09	5.0	6/25/94	M8020	Total Xylene Isomers	< 1	ug/L	

J09-SG10	5.0	6/25/94	M8010	1,1,1-Trichloroethane	< 1	ug/L	
J09-SG10	5.0	6/25/94	M8010	1,1,2-Trichloroethane	< 1	ug/L	
J09-SG10	5.0	6/25/94	M8010	1,1-Dichloroethane	< 1	ug/L	
J09-SG10	5.0	6/25/94	M8010	1,1-Dichloroethene	< 1	ug/L	
J09-SG10	5.0	6/25/94	M8010	Carbon Tetrachloride	< 1	ug/L	
J09-SG10	5.0	6/25/94	M8010	Chloroform	< 1	ug/L	
J09-SG10	5.0	6/25/94	M8010	cis-1,2-Dichloroethene	< 1	ug/L	
J09-SG10	5.0	6/25/94	M8010	Methylene Chloride	< 1	ug/L	
J09-SG10	5.0	6/25/94	M8010	Tetrachloroethene	< 1	ug/L	
J09-SG10	5.0	6/25/94	M8010	trans-1,2-Dichloroethene	< 1	ug/L	
J09-SG10	5.0	6/25/94	M8010	Trichloroethene	< 1	ug/L	
J09-SG10	5.0	6/25/94	M8020	Benzene	< 1	ug/L	
J09-SG10	5.0	6/25/94	M8020	Ethylbenzene	< 1	ug/L	
J09-SG10	5.0	6/25/94	M8020	Toluene	< 1	ug/L	
J09-SG10	5.0	6/25/94	M8020	Total FID Volatiles	< 10	ug/L	
J09-SG10	5.0	6/25/94	M8020	Total Xylene Isomers	< 1	ug/L	

Summary Table of Analytical Data



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Sample ID	Sample Depth (ft)	Sample Date	Method	Analyte	Value	Units	Flag
J09-SS01-1-S	0.25-0.5	7/12/94	6010	Arsenic	10	mg/kg	J
J09-SS01-1-S	0.25-0.5	7/12/94	6010	Barium	100	mg/kg	
J09-SS01-1-S	0.25-0.5	7/12/94	6010	Cadmium	1.3	mg/kg	
J09-SS01-1-S	0.25-0.5	7/12/94	6010	Chromium	6.9	mg/kg	
J09-SS01-1-S	0.25-0.5	7/12/94	6010	Lead	12	mg/kg	J
J09-SS01-1-S	0.25-0.5	7/12/94	6010	Selenium	< 5	mg/kg	
J09-SS01-1-S	0.25-0.5	7/12/94	6010	Silver	< 0.9	mg/kg	
J09-SS01-1-S	0.25-0.5	7/12/94	7471	Mercury	< 0.04	mg/kg	
J09-SS01-1-S	0.25-0.5	7/12/94	8015M	TPH (as diesel)	< 1	mg/kg	
J09-SS01-1-S	0.25-0.5	7/12/94	D2216	Moisture/TNFR	0.78	percent	
J09-SS01-1-S	0.25-0.5	7/12/94	D4031	Immunoassay BTEX	<2	mg/kg	

J09-SS02-1-S	0.25-0.5	7/12/94	6010	Arsenic	18	mg/kg	J
J09-SS02-1-S	0.25-0.5	7/12/94	6010	Barium	170	mg/kg	
J09-SS02-1-S	0.25-0.5	7/12/94	6010	Cadmium	2.2	mg/kg	
J09-SS02-1-S	0.25-0.5	7/12/94	6010	Chromium	13	mg/kg	
J09-SS02-1-S	0.25-0.5	7/12/94	6010	Lead	21	mg/kg	J
J09-SS02-1-S	0.25-0.5	7/12/94	6010	Selenium	6.7	mg/kg	J
J09-SS02-1-S	0.25-0.5	7/12/94	6010	Silver	< 0.9	mg/kg	
J09-SS02-1-S	0.25-0.5	7/12/94	7471	Mercury	0.041	mg/kg	J
J09-SS02-1-S	0.25-0.5	7/12/94	8015M	TPH (as diesel)	< 1	mg/kg	
J09-SS02-1-S	0.25-0.5	7/12/94	D2216	Moisture/TNFR	2.1	percent	
J09-SS02-1-S	0.25-0.5	7/12/94	D4031	Immunoassay BTEX	<2	mg/kg	

J09-SS03-1-S	0.25-0.5	7/12/94	6010	Arsenic	8.3	mg/kg	J
J09-SS03-1-S	0.25-0.5	7/12/94	6010	Barium	100	mg/kg	
J09-SS03-1-S	0.25-0.5	7/12/94	6010	Cadmium	2.1	mg/kg	
J09-SS03-1-S	0.25-0.5	7/12/94	6010	Chromium	7.3	mg/kg	
J09-SS03-1-S	0.25-0.5	7/12/94	6010	Lead	11	mg/kg	J
J09-SS03-1-S	0.25-0.5	7/12/94	6010	Selenium	< 5	mg/kg	
J09-SS03-1-S	0.25-0.5	7/12/94	6010	Silver	< 0.9	mg/kg	
J09-SS03-1-S	0.25-0.5	7/12/94	7471	Mercury	< 0.04	mg/kg	
J09-SS03-1-S	0.25-0.5	7/12/94	8015M	TPH (as diesel)	< 1	mg/kg	
J09-SS03-1-S	0.25-0.5	7/12/94	D2216	Moisture/TNFR	2.5	percent	
J09-SS03-1-S	0.25-0.5	7/12/94	D4031	Immunoassay BTEX	<2	mg/kg	

J09-SS04-1-S	0.25-0.5	7/12/94	6010	Arsenic	9.5	mg/kg	J
J09-SS04-1-S	0.25-0.5	7/12/94	6010	Barium	120	mg/kg	
J09-SS04-1-S	0.25-0.5	7/12/94	6010	Cadmium	1.7	mg/kg	
J09-SS04-1-S	0.25-0.5	7/12/94	6010	Chromium	8.6	mg/kg	
J09-SS04-1-S	0.25-0.5	7/12/94	6010	Lead	13	mg/kg	J
J09-SS04-1-S	0.25-0.5	7/12/94	6010	Selenium	6.4	mg/kg	J
J09-SS04-1-S	0.25-0.5	7/12/94	6010	Silver	< 0.9	mg/kg	
J09-SS04-1-S	0.25-0.5	7/12/94	7471	Mercury	< 0.04	mg/kg	
J09-SS04-1-S	0.25-0.5	7/12/94	8015M	TPH (as diesel)	< 1	mg/kg	

Summary Table of Analytical Data

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Sample ID	Sample Depth (ft)	Sample Date	Method	Analyte	Value	Units	Flag
J09-SS04-1-S	0.25-0.5	7/12/94	D2216	Moisture/TNFR	1.7	percent	
J09-SS04-1-S	0.25-0.5	7/12/94	D4031	Immunoassay BTEX	<2	mg/kg	

J09-SS05-1-S	0.25-0.5	7/12/94	6010	Arsenic	7	mg/kg	J
J09-SS05-1-S	0.25-0.5	7/12/94	6010	Barium	83	mg/kg	
J09-SS05-1-S	0.25-0.5	7/12/94	6010	Cadmium	0.65	mg/kg	
J09-SS05-1-S	0.25-0.5	7/12/94	6010	Chromium	4.2	mg/kg	J
J09-SS05-1-S	0.25-0.5	7/12/94	6010	Lead	6.5	mg/kg	J
J09-SS05-1-S	0.25-0.5	7/12/94	6010	Selenium	< 5	mg/kg	
J09-SS05-1-S	0.25-0.5	7/12/94	6010	Silver	< 0.9	mg/kg	
J09-SS05-1-S	0.25-0.5	7/12/94	7471	Mercury	< 0.04	mg/kg	
J09-SS05-1-S	0.25-0.5	7/12/94	8015M	TPH (as diesel)	< 1	mg/kg	
J09-SS05-1-S	0.25-0.5	7/12/94	D2216	Moisture/TNFR	0.68	percent	
J09-SS05-1-S	0.25-0.5	7/12/94	D4031	Immunoassay BTEX	<2	mg/kg	

J09-SS06-1-S	0.25-0.5	7/12/94	6010	Arsenic	8.5	mg/kg	J
J09-SS06-1-S	0.25-0.5	7/12/94	6010	Barium	120	mg/kg	
J09-SS06-1-S	0.25-0.5	7/12/94	6010	Cadmium	1.7	mg/kg	
J09-SS06-1-S	0.25-0.5	7/12/94	6010	Chromium	8.6	mg/kg	
J09-SS06-1-S	0.25-0.5	7/12/94	6010	Lead	9.4	mg/kg	J
J09-SS06-1-S	0.25-0.5	7/12/94	6010	Selenium	6.3	mg/kg	J
J09-SS06-1-S	0.25-0.5	7/12/94	6010	Silver	< 0.9	mg/kg	
J09-SS06-1-S	0.25-0.5	7/12/94	7471	Mercury	< 0.04	mg/kg	
J09-SS06-1-S	0.25-0.5	7/12/94	8015M	TPH (as diesel)	< 1	mg/kg	
J09-SS06-1-S	0.25-0.5	7/12/94	D2216	Moisture/TNFR	0.89	percent	
J09-SS06-1-S	0.25-0.5	7/12/94	D4031	Immunoassay BTEX	<2	mg/kg	

J09-SS07-1-S	0.25-0.5	7/12/94	6010	Arsenic	16	mg/kg	J
J09-SS07-1-S	0.25-0.5	7/12/94	6010	Barium	160	mg/kg	
J09-SS07-1-S	0.25-0.5	7/12/94	6010	Cadmium	2.1	mg/kg	
J09-SS07-1-S	0.25-0.5	7/12/94	6010	Chromium	12	mg/kg	
J09-SS07-1-S	0.25-0.5	7/12/94	6010	Lead	13	mg/kg	J
J09-SS07-1-S	0.25-0.5	7/12/94	6010	Selenium	< 5	mg/kg	
J09-SS07-1-S	0.25-0.5	7/12/94	6010	Silver	< 0.9	mg/kg	
J09-SS07-1-S	0.25-0.5	7/12/94	7471	Mercury	< 0.04	mg/kg	
J09-SS07-1-S	0.25-0.5	7/12/94	8015M	TPH (as diesel)	< 1	mg/kg	
J09-SS07-1-S	0.25-0.5	7/12/94	D2216	Moisture/TNFR	1.9	percent	
J09-SS07-1-S	0.25-0.5	7/12/94	D4031	Immunoassay BTEX	<2	mg/kg	

J09-SS07-1-SD (DP054)	0.25-0.5	7/12/94	6010	Arsenic	8.1	mg/kg	J
J09-SS07-1-SD (DP054)	0.25-0.5	7/12/94	6010	Barium	140	mg/kg	
J09-SS07-1-SD (DP054)	0.25-0.5	7/12/94	6010	Cadmium	0.69	mg/kg	
J09-SS07-1-SD (DP054)	0.25-0.5	7/12/94	6010	Chromium	8.1	mg/kg	
J09-SS07-1-SD (DP054)	0.25-0.5	7/12/94	6010	Lead	10	mg/kg	J
J09-SS07-1-SD (DP054)	0.25-0.5	7/12/94	6010	Selenium	< 5	mg/kg	

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Sample ID	Sample Depth (ft)	Sample Date	Method	Analyte	Value	Units	Flag
J09-SS07-1-SD (DP054)	0.25-0.5	7/12/94	6010	Silver	< 0.9	mg/kg	
J09-SS07-1-SD (DP054)	0.25-0.5	7/12/94	7471	Mercury	< 0.04	mg/kg	
J09-SS07-1-SD (DP052)	0.25-0.5	7/12/94	8015M	TPH (as diesel)	< 1	mg/kg	
J09-SS07-1-SD (DP053)	0.25-0.5	7/12/94	8015M	TPH (as diesel)	0	mg/kg	
J09-SS07-1-SD (DP051)	0.25-0.5	7/12/94	8260	1,1,1,2-Tetrachloroethane	< 0.4	ug/kg	UJ-
J09-SS07-1-SD (DP051)	0.25-0.5	7/12/94	8260	1,1,1-Trichloroethane	< 0.6	ug/kg	UJ-
J09-SS07-1-SD (DP051)	0.25-0.5	7/12/94	8260	1,1,2,2-Tetrachloroethane	< 0.2	ug/kg	UJ-
J09-SS07-1-SD (DP051)	0.25-0.5	7/12/94	8260	1,1,2-Trichloroethane	< 0.4	ug/kg	UJ-
J09-SS07-1-SD (DP051)	0.25-0.5	7/12/94	8260	1,1-Dichloroethane	< 0.2	ug/kg	UJ-
J09-SS07-1-SD (DP051)	0.25-0.5	7/12/94	8260	1,1-Dichloroethene	< 0.2	ug/kg	UJ-
J09-SS07-1-SD (DP051)	0.25-0.5	7/12/94	8260	1,2,3-Trichloropropane	< 0.8	ug/kg	UJ-
J09-SS07-1-SD (DP051)	0.25-0.5	7/12/94	8260	1,2-Dichlorobenzene	< 0.2	ug/kg	UJ-
J09-SS07-1-SD (DP051)	0.25-0.5	7/12/94	8260	1,2-Dichloroethane	< 0.6	ug/kg	UJ-
J09-SS07-1-SD (DP051)	0.25-0.5	7/12/94	8260	1,2-Dichloroproppane	< 0.8	ug/kg	UJ-
J09-SS07-1-SD (DP051)	0.25-0.5	7/12/94	8260	1,3-Dichlorobenzene	< 0.2	ug/kg	UJ-
J09-SS07-1-SD (DP051)	0.25-0.5	7/12/94	8260	1,4-Dichlorobenzene	< 0.4	ug/kg	UJ-
J09-SS07-1-SD (DP051)	0.25-0.5	7/12/94	8260	2-Chloroethylvinylether	< 0.6	ug/kg	UJ-
J09-SS07-1-SD (DP051)	0.25-0.5	7/12/94	8260	Benzene	< 0.2	ug/kg	UJ-
J09-SS07-1-SD (DP051)	0.25-0.5	7/12/94	8260	Benzyl chloride	< 0.6	ug/kg	UJ-
J09-SS07-1-SD (DP051)	0.25-0.5	7/12/94	8260	Bromobenzene	< 0.4	ug/kg	UJ-
J09-SS07-1-SD (DP051)	0.25-0.5	7/12/94	8260	Bromodichloromethane	< 0.2	ug/kg	UJ-
J09-SS07-1-SD (DP051)	0.25-0.5	7/12/94	8260	Bromoform	< 0.2	ug/kg	UJ-
J09-SS07-1-SD (DP051)	0.25-0.5	7/12/94	8260	Bromomethane	< 0.2	ug/kg	UJ-
J09-SS07-1-SD (DP051)	0.25-0.5	7/12/94	8260	Carbon Tetrachloride	< 0.6	ug/kg	UJ-
J09-SS07-1-SD (DP051)	0.25-0.5	7/12/94	8260	Chlorobenzene	< 0.2	ug/kg	UJ-
J09-SS07-1-SD (DP051)	0.25-0.5	7/12/94	8260	Chloroethane	< 0.2	ug/kg	UJ-
J09-SS07-1-SD (DP051)	0.25-0.5	7/12/94	8260	Chloroform	< 0.2	ug/kg	UJ-
J09-SS07-1-SD (DP051)	0.25-0.5	7/12/94	8260	Chloromethane	< 0.6	ug/kg	UJ-
J09-SS07-1-SD (DP051)	0.25-0.5	7/12/94	8260	cis-1,3-Dichloropropene	< 0.2	ug/kg	UJ-
J09-SS07-1-SD (DP051)	0.25-0.5	7/12/94	8260	Dibromochloromethane	< 0.6	ug/kg	UJ-
J09-SS07-1-SD (DP051)	0.25-0.5	7/12/94	8260	Dibromomethane	< 0.2	ug/kg	UJ-
J09-SS07-1-SD (DP051)	0.25-0.5	7/12/94	8260	Dichlorodifluoromethane	< 0.1	ug/kg	UJ-
J09-SS07-1-SD (DP051)	0.25-0.5	7/12/94	8260	Ethylbenzene	< 0.2	ug/kg	UJ-
J09-SS07-1-SD (DP051)	0.25-0.5	7/12/94	8260	Methylene chloride	< 0.4	ug/kg	UJ-
J09-SS07-1-SD (DP051)	0.25-0.5	7/12/94	8260	Tetrachloroethene	< 0.6	ug/kg	UJ-
J09-SS07-1-SD (DP051)	0.25-0.5	7/12/94	8260	Toluene	< 0.4	ug/kg	UJ-
J09-SS07-1-SD (DP051)	0.25-0.5	7/12/94	8260	Total Xylene Isomers	< 0.6	ug/kg	UJ-
J09-SS07-1-SD (DP051)	0.25-0.5	7/12/94	8260	trans-1,2-Dichloroethene	< 0.2	ug/kg	UJ-
J09-SS07-1-SD (DP051)	0.25-0.5	7/12/94	8260	trans-1,3-Dichloropropene	< 0.2	ug/kg	UJ-
J09-SS07-1-SD (DP051)	0.25-0.5	7/12/94	8260	Trichloroethene	< 1	ug/kg	UJ-
J09-SS07-1-SD (DP051)	0.25-0.5	7/12/94	8260	Trichlorofluoromethane	< 0.1	ug/kg	UJ-
J09-SS07-1-SD (DP051)	0.25-0.5	7/12/94	8260	Vinyl chloride	< 0.2	ug/kg	UJ-
J09-SS07-1-SD (DP051)	0.25-0.5	7/12/94	D2216	Moisture/TNFR	2.3	percent	
J09-SS07-1-SD (DP054)	0.25-0.5	7/12/94	D2216	Moisture/TNFR	2.1	percent	
J09-SS07-1-SD (DP050)	0.25-0.5	7/12/94	D4031	Immunoassay BTEX	<2	mg/kg	



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Sample ID	Sample Depth (ft)	Sample Date	Method	Analyte	Value	Units	Flag
J09-SS08-1-S	0.25-0.5	7/12/94	6010	Arsenic	7.8	mg/kg	
J09-SS08-1-S	0.25-0.5	7/12/94	6010	Barium	110	mg/kg	
J09-SS08-1-S	0.25-0.5	7/12/94	6010	Cadmium	1.2	mg/kg	
J09-SS08-1-S	0.25-0.5	7/12/94	6010	Chromium	6.9	mg/kg	
J09-SS08-1-S	0.25-0.5	7/12/94	6010	Lead	9.9	mg/kg	J
J09-SS08-1-S	0.25-0.5	7/12/94	6010	Selenium	< 5	mg/kg	
J09-SS08-1-S	0.25-0.5	7/12/94	6010	Silver	< 0.9	mg/kg	
J09-SS08-1-S	0.25-0.5	7/12/94	7471	Mercury	< 0.04	mg/kg	
J09-SS08-1-S	0.25-0.5	7/12/94	8015M	TPH (as diesel)	< 1	mg/kg	
J09-SS08-1-S	0.25-0.5	7/12/94	D2216	Moisture/TNFR	0.7	percent	
J09-SS08-1-S	0.25-0.5	7/12/94	D4031	Immunoassay BTEX	<2	mg/kg	

J09-SS09-1-S	0.25-0.5	7/12/94	6010	Arsenic	5	mg/kg	J
J09-SS09-1-S	0.25-0.5	7/12/94	6010	Barium	85	mg/kg	
J09-SS09-1-S	0.25-0.5	7/12/94	6010	Cadmium	1.5	mg/kg	
J09-SS09-1-S	0.25-0.5	7/12/94	6010	Chromium	6	mg/kg	
J09-SS09-1-S	0.25-0.5	7/12/94	6010	Lead	8.7	mg/kg	J
J09-SS09-1-S	0.25-0.5	7/12/94	6010	Selenium	< 5	mg/kg	
J09-SS09-1-S	0.25-0.5	7/12/94	6010	Silver	< 0.9	mg/kg	
J09-SS09-1-S	0.25-0.5	7/12/94	7471	Mercury	< 0.04	mg/kg	
J09-SS09-1-S	0.25-0.5	7/12/94	8015M	TPH (as diesel)	1.6	mg/kg	J
J09-SS09-1-S	0.25-0.5	7/12/94	D2216	Moisture/TNFR	0.3	percent	
J09-SS09-1-S	0.25-0.5	7/12/94	D4031	Immunoassay BTEX	<2	mg/kg	

J09-SS10-1-S	0.25-0.5	7/12/94	6010	Arsenic	< 4	mg/kg	
J09-SS10-1-S	0.25-0.5	7/12/94	6010	Barium	130	mg/kg	
J09-SS10-1-S	0.25-0.5	7/12/94	6010	Cadmium	0.51	mg/kg	U
J09-SS10-1-S	0.25-0.5	7/12/94	6010	Chromium	11	mg/kg	
J09-SS10-1-S	0.25-0.5	7/12/94	6010	Lead	11	mg/kg	J
J09-SS10-1-S	0.25-0.5	7/12/94	6010	Selenium	< 5	mg/kg	
J09-SS10-1-S	0.25-0.5	7/12/94	6010	Silver	< 0.9	mg/kg	
J09-SS10-1-S	0.25-0.5	7/12/94	7471	Mercury	< 0.04	mg/kg	
J09-SS10-1-S	0.25-0.5	7/12/94	8015M	TPH (as diesel)	1	mg/kg	J
J09-SS10-1-S	0.25-0.5	7/12/94	D2216	Moisture/TNFR	1.8	percent	
J09-SS10-1-S	0.25-0.5	7/12/94	D2216	Moisture/TNFR	1.7	percent	
J09-SS10-1-S	0.25-0.5	7/12/94	D4031	Immunoassay BTEX	<2	mg/kg	

J09-SS11-1-S	0.25-0.5	7/12/94	6010	Arsenic	< 4	mg/kg	
J09-SS11-1-S	0.25-0.5	7/12/94	6010	Barium	160	mg/kg	
J09-SS11-1-S	0.25-0.5	7/12/94	6010	Cadmium	0.64	mg/kg	U
J09-SS11-1-S	0.25-0.5	7/12/94	6010	Chromium	6.4	mg/kg	
J09-SS11-1-S	0.25-0.5	7/12/94	6010	Lead	7	mg/kg	J
J09-SS11-1-S	0.25-0.5	7/12/94	6010	Selenium	< 5	mg/kg	
J09-SS11-1-S	0.25-0.5	7/12/94	6010	Silver	< 0.9	mg/kg	
J09-SS11-1-S	0.25-0.5	7/12/94	7471	Mercury	< 0.04	mg/kg	

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Sample ID	Sample Depth (ft)	Sample Date	Method	Analyte	Value	Units	Flag
J09-SS11-1-S	0.25-0.5	7/12/94	8015M	TPH (as diesel)	1.1	mg/kg	J
J09-SS11-1-S	0.25-0.5	7/12/94	D2216	Moisture/TNFR	0.76	percent	
J09-SS11-1-S	0.25-0.5	7/12/94	D4031	Immunoassay BTEX	<2	mg/kg	

Appendix C

Survey Data at SWMU J-09
Hawthorne Army Depot
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Point Name	Northing	Easting
TEMPPMON16	517201.62	1378065.92
TEMPPMON17	516704.9	1376694.94
SB-1	516939.84	1377664.05
SB-2	516693.11	1377022.62
SB-3	516818.15	1377453.56
SG-1	516984.99	1377808.71
SG-10	516718.32	1377924.34
SG-2	516919.1	1377506.42
SG-3	516851.68	1377367.63
SG-4	516808.9	1377171.68
SG-5	516745.82	1376957.16
SG-6	516520.77	1376878.02
SG-7	516620.61	1377242.52
SG-8	516601.9	1377479.29
SG-9	516614.89	1377742.2
SS-1	516835.64	1377879.65
SS-10	516801.54	1377062.09
SS-11	517019.31	1377795.62
SS-2	517014.25	1377649.97
SS-3	516762.76	1377789.65
SS-4	516804.7	1377473.94
SS-5	516765.92	1377287.83
SS-6	516715.07	1377196.03
SS-7	516720.14	1376884.32
SS-8	516675.25	1376772.43
SS-9	516573.27	1377080.14

Footnote: Survey data in Nevada State Plane West, 1927 coordinates.

Appendix D

